Scale-Up of the Standard Days Method® (SDM) in Mali

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The Institute for Reproductive Health
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The Institute for Reproductive Health (IRH) is part of the Georgetown University Medical Center, an internationally recognized academic medical center with a three-part mission of research, teaching and patient care. IRH is a leading technical resource and learning center committed to developing and increasing the availability of effective, easy-to-use, fertility awareness-based methods (FAM) of family planning.

IRH was awarded the 5-year Fertility Awareness-Based Methods (FAM) Project by the United States Agency for International Development (USAID) in September 2007. This 5-year project aims to increase access and use of FAM within a broad range of service delivery programs using systems-oriented scaling up approaches.

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Acronyms

AMPPF	Association Malienne pour la Protection et la Promotion de la Famille
ASACO	Association de Santé Communautaire
ASDAP	Association de Soutien au Développement des Activités de Population
ATN+	Assistance Technique National (USAID program)
CAG	Central d'Achat des Médicaments Génériques
CBD	Community-Based Distributor or Distribution
CHA	Community Health Agent (Agent de Santé Communautaire)
COFEMALI	Coalition des Femmes du Mali (Coalition of Malian Women)
CPS	Cellule de la Planification et statistique
CSCOM	Centre de Santé Communautaire (Community Health Center)
DHS	Demographic Health Survey
DNS	Direction Nationale de la Santé (National Directorate of Health)
DPM	Division Pharmacies et Médicaments
DSR	Division Santé de la Reproduction (Reproductive Health Division of MoH)
FAM	Fertility Awareness-Based Methods
FP	Family Planning
GP/SP	Groupe Pivot Santé / Population
IEC	Information Education Communication
INFSS	Institut National de Formation en Science de la Santé
IRH	Institute for Reproductive Health
KIT	Knowledge Improvement Tool
LAM	Lactational Amenorrhea Method
M&E	Monitoring and Evaluation
MoH	Ministry of Health
MSI	Marie Stopes International
NGO	Nongovernmental Organization
PKC	Projet *Keneya Ciwara* (USAID program)
PPM	Pharmacie Populaire du Mali
PSI	Population Services International
RH	Reproductive Health
SDM	Standard Days Method
SIS	Système d'Information Sanitaire
TFR	Total Fertility Rate

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Executive Summary

Since the early 2000s, the Institute for Reproductive Health at Georgetown University (IRH) has introduced and tested the Standard Days Method® (SDM) in a variety of service delivery settings around the world. IRH and partners are now scaling up SDM services in family planning (FP) programs in several African countries, India, and Guatemala. This report summarizes the choices, approaches and results of a systematic and successful scale-up effort in Mali, complemented by related research, from 2007 through early 2012.

Mali's Ministry of Health (MOH) learned of and incorporated SDM into several of its normative documents in 2005. It was not until late 2006, however, that IRH and USAID formally introduced the method in Mali and that an initial lot of 60,000, requested by the MOH, CycleBeads® arrived in country.

The impetus of the MOH (specifically, its Division of Reproductive Health or DSR) was to expand the range of modern methods available to a population that experiences socio-cultural, religious, economic and logistical constraints to addressing their FP needs. Historically, large families with numerous children have met livelihood needs as well as conferred social status on both men and women. Men are generally accorded absolute power over reproductive decisions, and women's use of FP may be considered a sign of infidelity in a society that values women's monogamy and fertility.

Mali's decentralization process over two decades has granted greater autonomy to district governments and their social services, and community management and oversight of those services. Still, the country's vast size, limited infrastructure, and widespread poverty pose formidable logistics constraints to the delivery of health services including FP. The MOH/DSR favor birth spacing and the use of modern contraception as a means of improving women's and children's health.

In March 2012, Mali experienced a coup d'état and an escalation of war in its northern regions. IRH's work in Mali was curtailed and the project closed prematurely.

Map: Adapted from University of Texas Libraries

MALI AT-A-GLANCE

CURRENT POPULATION:	15.8 million
POPULATION GROWTH RATE:	3% per annum
GDP PER CAPITA, 2011:	$684
POPULATION ENGAGED IN AGRICULTURE:	80%
TOTAL FERTILITY RATE, 2011:	6.2
CONTRACEPTIVE PREVALENCE RATE, WOMEN AGES 15-49, 2006:	8.2
UNMET NEED FOR CONTRACEPTION, MARRIED WOMEN AGES 15-49, 2006:	31.2%
MATERNAL MORTALITY RATIO PER 100,000 LIVE BIRTHS:	460
INFANT MORTALITY RATE PER 1,000 LIVE BIRTHS:	98.2

Source: World Bank World Development Indicators

Introductory Phase 2006-2007

In late 2006, USAID, IRH, and the MOH formally introduced SDM in Mali, resulting in the method's 2005 inclusion in reproductive health policy, norms, and procedures. IRH initially collaborated with the large-scale *Projet Keneya Ciwara*[1] to integrate SDM into health activities in 11 districts plus Bamako. Altogether, this area was home to almost one-third of Mali's population. By the end of one year of IRH technical assistance, over 300 MOH and NGO master trainers had trained more than 4,000 service providers from central to district levels, and NGOs were training *relais* (community health workers) to promote and deliver CycleBeads in communities. SDM had been further integrated into national documents, including health supervision guides and contraceptive acquisition tables. Population Services International (PSI) had begun socially marketing CycleBeads.

Scale-Up Phase 2007-2012

SDM scale-up in Mali began in late 2007 and was planned to last five years. IRH's strategic objective was to *strengthen SDM integration in 90% of service delivery points—public sector, private sector and community—in all Mali's regions and Bamako*. The role IRH played was that of technical assistance provider (advocacy, coordination, training and resources), while the MOH/DSR led actual service provision with the support of donors, national and international NGOs.

In late 2008, IRH introduced the ExpandNet framework to guide SDM scale-up in Mali. An introductory and strategy-setting meeting positioned MOH/DSR as leader and coordinator of the scale-up process and resulted in a multi-

HOW SUCCESSFUL IN MALI?

As of March 2012:

SERVICE EXPANSION

SDM services available in an estimated 88% (1,273) of service delivery points and in all eight regions of Mali

19 organizations including the MOH able to build others' capacity to offer SDM

INSTITUTIONALIZATION

SDM fully integrated into national FP program and these sub-systems:

- Norms, policies, guidelines
- HMIS reporting system
- Some pre service training curricula
- Logistics system
- National surveys
- MOH-sanctioned IEC materials

SDM USERS & KNOWLEDGE OF SDM OPTION

IRH was unable to conduct most endline research in Mali, including household surveys on knowledge and use of SDM.

New SDM users comprised between 1 and 3 percent of new modern FP users in three regions (2007-early 2011).

A client follow-up survey found 100% satisfaction with SDM; 75% of clients correctly demonstrated use of CycleBeads, and 94% verified correct placement of ring by referencing markings on their calendar).

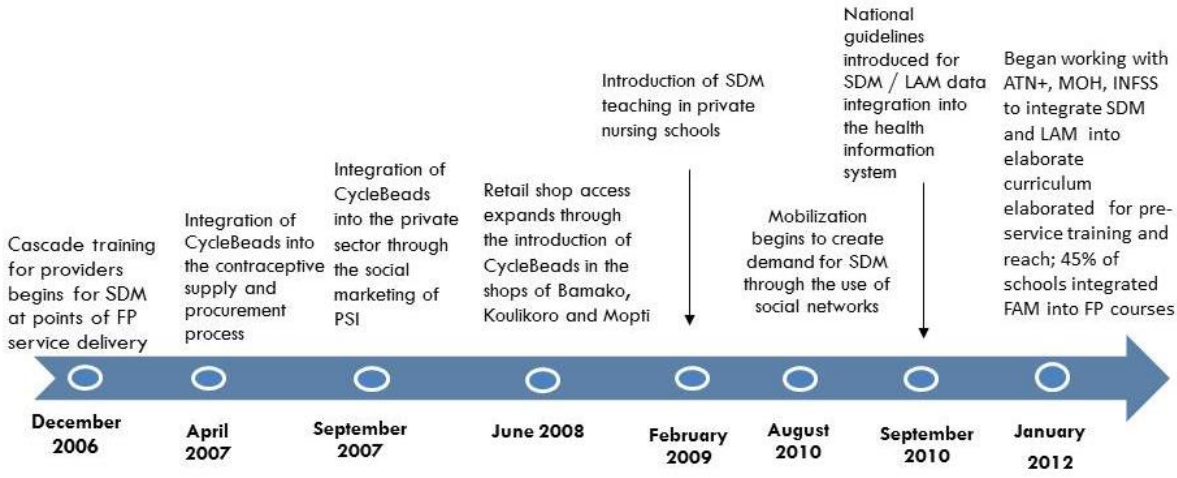
Partial service delivery point data indicated at least 31,400 CycleBeads dispensed at public, private facilities.

[1] Managed by CARE, funded by USAID, PKC supported the decentralization process by helping communities manage, oversee, use and promote health services and improve household health practices.

organizational plan for actions, roles, responsibilities, and objectives along both the horizontal and vertical axes of the ExpandNet framework. The MOH/DSR convened annual review and planning meetings thereafter.

Using Data to Guide Scale-Up

Routine monitoring data, punctuated by several types of research, helped IRH, the MOH/DSR, and other key actors track SDM scale-up, detect successes, identify problems, and design solutions.



Situational Analysis/Baseline (2009): This multi-component research captured SDM integration to date, and served as a form of baseline against which subsequent changes were compared. Stakeholder interviews revealed that IRH partner organizations had largely integrated SDM into their program planning, supervision, training, and budgets. Interviewees felt that work to date was well targeted and of high quality, but *more* of all components—awareness-raising, provider training, funding—was needed to ensure sustainable scale-up. Service provider interviews revealed that only 37% of providers had offered SDM to clients, although 100% claimed to have been trained to offer it. Only a quarter of health facilities had CycleBeads in stock at the time of the research. Household interviews confirmed men's reluctance to use or condone spouses' use of any FP method, men and women's desire to have numerous children, and low understanding of the benefits of FP and/or birth spacing.

Routine Monitoring: IRH annually monitored indicators against benchmarks; periodically collected data at service delivery points on availability and use of SDM; twice applied the Knowledge Improvement Tool (KIT) with service providers; and undertook one follow-up survey with SDM users. Further, IRH and the MOH organized supervision and data collection quarterly at district level and semi-annually at regional and central levels.

Endline Research (2012): Political events in Mali precluded two of three planned endline studies, and delayed the third—stakeholder interviews—until late 2012. Interviews were held to determine stakeholder perceptions of the scale-up process and recommendations for ensuring SDM's sustainability in the national FP program in the future. The nine respondents expressed a favorable attitude toward the SDM scale-up process, and toward the niche that SDM fills in the national method mix. Yet they also expressed concerns about lingering provider bias against the method (due to doubts about its effectiveness) and about MOH/DSR leadership abilities (including the ability to overcome provider bias). Interviewees recommended that funding be made available to MOH/DSR to complete the curtailed scale-up activities, to continue SDM promotion through IEC channels, and to continue to work with religious leaders using SDM as a gateway to broader discussions of birth spacing and FP.

IRH had organized collection of data on new SDM users as a proportion of all FP users (2007 to early 2011) from MOH health facilities in three regions in late 2011, and PSI sales data were also available (2007 through 2012).

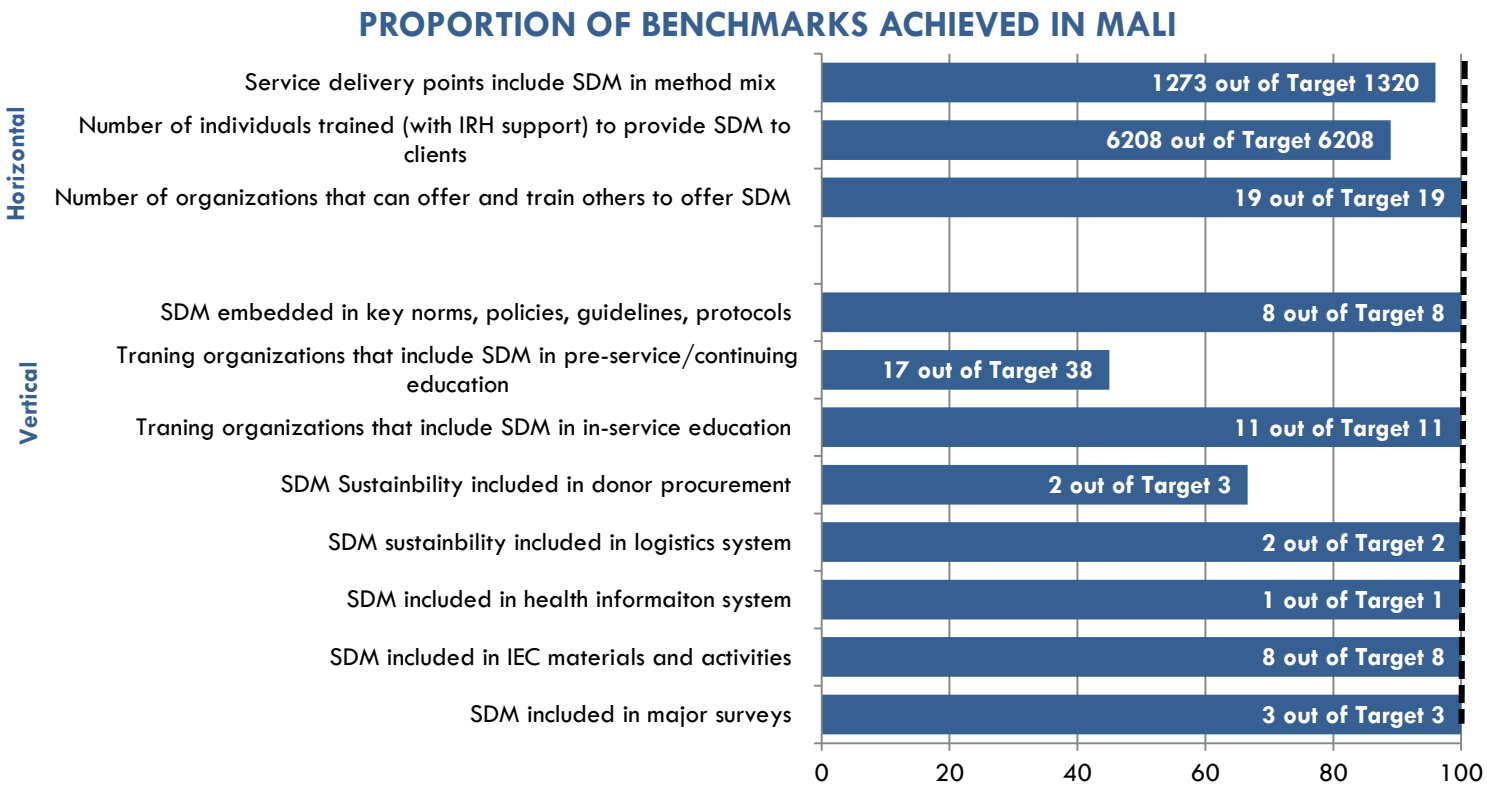
REGION	NEW FP USERS	NEW SDM USERS	% OF SDM USERS
Koulikoro	99,193	3,050	3.1
Ségou	131,552	1,196	0.9
Sikasso	149,857	1,374	0.9

Combined with monitoring data, these present a partial picture of SDM uptake in Mali. PSI reports that it dispensed a total of 25,810 CycleBeads between 2007 and early 2012 in private pharmacies, clinics, small retail outlets and community-based sales.
The relative contribution of SDM use to all new FP use in the public section in three regions ranges from one to three percent.

Achievement of SDM Benchmark Targets

The figure below shows IRH's overall achievement of its benchmark targets, on both horizontal and vertical axes, in Mali. Despite the abrupt and early end to scale-up activities, only four of 11 benchmarks fell short of target.

IRH's work along the *horizontal* axis increased availability of and provider capacity to offer SDM across Mali's eight regions plus Bamako. By the end of scale-up, 1,273 service delivery points (96% of target) included SDM in their method mix. In March 2012, most health personnel in 43 of Mali's 49 districts plus Bamako were trained to provide SDM in most service delivery points. Only six districts had no SDM capacity.



IRH directly or indirectly supported the training of more than 6,200 health workers to offer SDM. This number does not include *relais,* of whom approximately 13,000 were trained by PKC.

Nineteen entities including the MOH gained the capacity to undertake the full range of SDM service provision including training and/or supervising others to offer the method. In ExpandNet terminology, these are resource organizations, and they are important for the sustainability of a health innovation. In addition to the MOH, resource organizations in Mali include: PSI, Groupe Pivot Santé/Population (an influential Malian health networking/umbrella NGO), multilaterals such as WHO and UNICEF, and several international NGO consortia that manage large scale health programs with the MOH.

Activities on the *vertical* scale aimed to achieve the sustainable institutionalization of SDM in Mali. SDM was successfully integrated into FP policies, norms, and protocols. In fact, much of this integration occurred at the instigation of MOH/DSR prior to scale-up. Integration of the method in pre-service training curricula was complex in Mali, and IRH ultimately only partially achieved its aims. SDM was incorporated quite rapidly into curricula at the *Institut National de Formation en Science de la Santé* (Faculty of Medicine) and several private schools in Bamako. IRH's collaboration with Intrahealth to develop a comprehensive reproductive health and FP curriculum for nursing students progressed to

SCALE-UP SUCCESSES AND ACHIEVEMENTS IN MALI

As of March 2012:

- 1,273 service delivery points included SDM in their method mix.
- Most health personnel in 43 of Mali's 49 districts plus Bamako were trained to provide SDM.
- More than 6,200 health workers were trained to offer SDM.
- Approximately 13,000 *relais* were trained by PKC to offer SDM.
- Nineteen entities, including the MOH, gained the capacity to undertake the full range of SDM service provision.
- SDM was integrated in FP policies, norms, and protocols
- IRH and the MOH developed a standardized curricula covering all FP methods, which was partially rolled out before the project was disrupted.
- IRH advocacy with Mali's stakeholders in community logistics system led to fewer stockouts of CycleBeads.
- SDM/Cyclebeads was included as a discrete FP method in the health information system tools.
- SDM was included as a unique category in three planned national surveys.

the rollout phase before running into funding roadblocks. IRH then joined the MOH and others to develop a standardized set of curricula covering all FP methods, with components tailored to fit the types of providers being trained. IRH intended to accompany rollout of these curricula in 38 schools during 2012, but the political crisis prevented this. In the end, IRH achieved 45% of targets for the pre-service curriculum indicator.

IRH aimed to include SDM in three donor procurement systems: MOH, USAID and UNFPA. At present in Mali, only donors procure FP supplies, but MOH is included in this indicator because it (a) must formally request items before donors will order them, and (b) will eventually begin to procure some commodities with its own funds. Both MOH and USAID agreed to include CycleBeads in their FP requests or orders. That said, Mali is still drawing from the initial stock of 60,000 CycleBeads from 2006. In reality, therefore, no further donor procurement has taken place in Mali.

The 2009 situational analysis/baseline found that 22% of service delivery points surveyed had experienced stockouts of CycleBeads in the three previous months. Following extensive IRH advocacy with stakeholders in both of Mali's commodity logistics systems—the public and the private—a 2011 survey found a greatly improved situation. IRH counts full achievement of this target, while acknowledging that Mali's overall health logistics systems are subject to problems far larger than any single project could resolve.

The MOH revised its health information system tools in 2011/2012, and IRH took the opportunity to ensure that SDM appeared throughout the system as a discrete FP method. (Until that time, service providers had been trained to write 'SDM' or 'CycleBeads' into the 'other' column of their FP registers.) Specifically, IRH provided technical assistance in MOH

workshops in which the primary and secondary HMIS tools for reproductive health and FP were revised. These tools were then to be integrated into an electronic system at national level, but this step was interrupted by the crisis of March 2012.

Finally, IRH advocacy led to SDM's inclusion as a unique data category in all of three planned surveys. These included the 2008 *Etude d'Analyse Situationnelle* (MOH and USAID), the 2009-10 Multiple Indicator Cluster Survey (UNICEF) and the Demographic and Health Survey planned for 2012. (The 2006 DHS in Mali had no clear place to record SDM; responses may have been marked as 'male condom,' 'periodic abstinence,' or unspecified traditional methods.) The 2012 DHS was suspended due to the March crisis.

Scale-Up and the Mali Environment

Mali's MOH and especially the DSR showed consistently strong support of SDM, beginning with spontaneous adoption of the method. The MOH supported SDM's inclusion in large-scale projects with major institutional partners. Within the framework of these projects, important work such as service provider training and integration of SDM into *relais*' activities and national IEC took place.

Factors that Facilitated SDM Scale-Up in Mali:

- The MOH and especially the DSR showed consistently strong support of SDM.
- The MOH supported SDM's inclusion in large-scale projects with major institutional partners.

IRH's subjective impression is that global donor trends in favor of long-acting methods took their toll on SDM scale-up in Mali. There was no overt pressure to curtail SDM promotion, but the emphasis on increasing contraceptive prevalence rates (which is most easily or rapidly done by promoting long-acting methods) was felt by the MOH and other organizations that collaborated with IRH.

Factors that Limited SDM Scale-Up in Mali:

- Global donor trends that favored long acting methods
- The influence of pro-natalist trends and low levels of formal education among Malians

The strong influence of pro-natalist traditions inhibited uptake of FP methods including SDM, as did the relatively low level of formal education among Malians and especially Malian women. IRH and partners used a social network approach to design and implement several activities to make use of peer influence and provide support for FP use. These included trainings for networks of religious leaders to present general FP concepts and dispel myths; broadcasting radio spots and organizing home visits to encourage men to support their wives' use of FP; and reaching secondary school students with education on human reproduction, the menstrual cycle, and FP. In one particularly successful collaboration, IRH worked with *Coalition des Femmes du Mali* to use social diffusion via leaders of women's savings and loan groups. In three districts, the number of new FP users

(any modern method) rose by 23% in the three months after social diffusion, compared to the three months prior to the activity.

Resource and User Organizations

As noted, a resource organization is one that promotes and facilitates wider use of a health innovation—in this case, SDM—while a user organization is one that implements an innovation. The majority of IRH's 19 partner organizations in Mali played both roles during scale-up. In addition to MOH/DSR, the resource organizations PKC, ATN+, and PSI were of particular strategic importance to scale-up in Mali.

- **PKC** integrated SDM into its substantial IEC repertoire, trained service providers in 13 districts, and trained more than 13,000 *relais* to offer the method in communities.
- **ATN+** (*Assistance Technique National Plus*, a USAID-funded program for technical assistance to the health system at national and district levels) contributed to SDM integration in certain normative documents, and extended service provider training in FP and SDM throughout the country.
- **PSI** and its social marketing program integrated SDM and provider training in clinics, pharmacies, small retail outlets, and community sales agents, and aired radio and television spots.

Strategic Choice Areas

The ExpandNet framework guided IRH to make strategic choices in several areas based upon a careful analysis of the operating environment in Mali. These areas, as they applied to SDM scale-up, are briefly summarized here.

Capacity Building and Technical Assistance: IRH provided capacity building and technical assistance in various forms to its partner resource organizations, which in turn promoted SDM scale-up within their own purviews. This allowed rational and balanced progress along the horizontal and vertical axes of the ExpandNet framework.

Training throughout scale-up was done in cascade via MOH structures, directly and via large-scale programs (PKC, ATN+) that supported those structures. As the cascade proceeded from national to regional to district to community

KIT findings among 33 providers in 2012

- 22 sages femmes, 9 nurses, 2 doctors):
- 70% of all 33 providers were able to correctly instruct women to use CycleBeads
- 82% of the 22 sages femmes were able to correctly instruct women – a higher proportion than of all providers combined.
- CycleBeads were available at service points in all seven districts where KIT was used.

levels, IRH made several adjustments to the SDM training module. First, it was simplified and shortened, and thereby made more readily useable with service providers of all types. Next, at MOH request, IRH oversaw the integration of the SDM module into existing FP training materials that covered the entire, MOH-approved FP method mix. IRH also made sure that revisions to training curricula at one level (nurses, for example) were followed by corresponding revisions at other levels (*relais*, leaders of women's groups).

SDM was woven into the MOH's FP supervision documents, including the FP-specific supervision manual and the integrated supervision manual. IRH supported district health teams' ability to follow up on the quality of SDM service provision by using its KIT with selected service providers. The KIT both measures service provider knowledge and skills and offers opportunity for on-the-spot refresher training.

IRH in Mali also judges that its participatory approach to scale-up was a valuable means of building capacity among partner organizations. The original strategy-setting for scale-up along horizontal and vertical axes, activity implementation, monitoring and analysis of progress, and re-strategizing: all these, over time, strengthened not only SDM scale-up but the skills of implementers throughout Mali's public and private health service structure.

Demand Creation: IRH and partners developed or adapted IEC materials and communication tools for use in MOH health facilities and in communities, and PSI's social marketing program incorporated SDM in materials for private clinics and pharmacies. With IRH and the MOH, PSI also produced radio and television spots on SDM and the menstrual cycle. As noted, IRH and the *Coalition des Femmes du Mali* trained the leaders of 170 women's associations to provide peer education (social diffusion) on SDM and FP. Yet IRH and partners ultimately were frustrated by limited financial resources for IEC. A secondary constraint came in the form of donor policies that increasingly favored long-acting methods and their effect on health activities funded by those donors. Service providers received bonuses for signing up new users of long-acting methods, for example, but not other methods including SDM. ATN+, PSI and others' training sessions on FP and FP counseling concentrated more heavily on long-action methods and less on other methods including SDM.

Advocacy: IRH continuously advocated and collaborated with the MOH and other service providers to ensure SDM's inclusion in FP programs. The MoH and other partner FP programs have taken ownership of SDM as a result of their participation in scale-up work. SDM was successfully included both Mali's public and private logistics systems. As of early 2012, CycleBeads were integrated into two of three planned donor procurement systems, and IRH was working with the MOH to include SDM in SIS tools as the MOH revised its recording tools and transitioned to an electronic system. The March 2012 crisis, however,

prevented IRH and others from taking the final, formal steps of integrating CycleBeads into these last two categories.

Monitoring & Evaluation: The benchmarks that IRH defined at the beginning of the project were the foundation for results monitoring. Regular analysis of progress towards the benchmarks guided decision making and strategic planning. A variety of tools were used in the M&E process, including statistical data, the KIT, SDM Client Follow-Up, Most Significant Change Stories, and Global Surveys. Review meetings with partners and periodic supervision of service providers served as additional sources of information. Since SDM did not appear as a unique category in Mali's SIS, IRH undertook periodic data collection on the sale and use of CycleBeads to gage the number of users.

Resource Mobilization: IRH collected information on leveraging, or partners' use of their own resources to promote some aspect of SDM scale-up. For example, PKC used its own funds to train thousands of *relais* in FP including SDM; other instances involved supervision, promotion activities, or providing CycleBeads. IRH estimates that $613,100 were leveraged for SDM scale-up from 2007 to March 2012.

Key Elements That Facilitated Scale-Up In Mali

Reflecting on its experience in Mali and on results obtained, IRH notes the valuable role of the following in facilitating scale-up.

1. Formulating—from the beginning—multiple, compatible partnerships from among the spectrum of organizations involved in Mali's health sector, and offering attractive opportunities for collaboration throughout the scale-up period.
2. Continued leadership of MOH/DSR in promoting FP, and its coordinating role with all organizations to address FP gaps and services, which helped to ensure a certain level of accountability in SDM scale-up.
3. Using and sharing evidence-based research, and M&E of current activities, not only for planning but for attracting and engaging partners. Examples are the joint reviews of the 2008 strategic plan recommendations and the 2009 baseline study results; the Most Significant Change story collection report; and briefs on project successes in Mali and other countries.
4. IRH's ability to offer an array of technical assistance was very important for maintaining equilibrium between advances on the two scale-up axes.

Sustainability of SDM in Mali

Significant progress has been made across the various components of scaling up SDM at the national level. To assure that these achievements are sustained and/or advanced upon the end of the FAM project, however, there is a need to identify key actors and strategies that will move SDM forward in terms of advocacy, capacity building, logistics and procurement, IEC, and HMIS and M&E.

Scale-up Component	Action for Sustainability	Responsible Party
Advocacy	1. Advocate for inclusion of SDM in next DHS.	1. USAID
Capacity Building	1. Continue including SDM in FP training and supervision. 2. Include SDM as part of the FP activity focus in new USAID bilaterals. 3. Maintain SDM as part of the national FP training programs/curriculum for facility and CBD-based services.	1. MOH and current USAID bilaterals (PKC and ATN+) 2. USAID 3. MOH
Logistics and Procurement	1. Include CBs in the FP produce line in the private sector to replace IRH-funded PSI CB promotion. 2. Assess CB procurement need for two to five years (in light of oversupply of CB at the end of the Awareness Project).	1. USAID and other private sector FP donor 2. MOH
IEC	1. Finance TV and radio male involvement in SDM promotion campaign (created by PSI) to maintain increased sales under retail promoters.	1. USAID and other donors
HMIS/ Monitoring & Evaluation	1. Monitor that SDM information is completely and correctly recorded in revised HMIS. 2. Include SDM opt-in module in next DHS following resolution of the political crisis.	1. MOH 2. MOH with USAID

Mali Context

Mali is a vast, landlocked country in western Africa with a population of about 15.8 million people[2] (2013 estimate). French is the official language, but Bambara, spoken by about 80 percent of the population as a first or second language, is its *lingua franca*. Over 90% of the population is Muslim. The literacy rate hovers around 35% among men, and 20% among women.

The nation's economic activity and indeed its population are largely confined to the Niger, Bani and Senegal river basins; almost two-thirds of Mali's land is desert or semi-desert. About 80% of Mali's labor force is engaged in farming or fishing, typically at the subsistence level, as borne out by estimates that it represents less than 40% percent of gross domestic product, in spite of occupying such a significant proportion of the population. The 2011 GDP per capita was estimated at $684.[3]

Mali established a multi-party democracy in 1992 and for 20 years enjoyed relative political stability. Sporadic uprisings in the country's north were often described as minor exceptions to the national stability rule, until they sparked cataclysmic upheaval in early 2012 (see box).

Box 1: Premature End to Scale-Up in Mali

On March 21, 2012, elements from within the Malian army overthrew the elected government in Bamako. This event was as swift as it was unexpected.

The US Government reacted equally rapidly and IRH was instructed to put all operations on hold. After four months with no political resolution in sight and no authorization to support scale-up activities, the Institute for Reproductive Health, with USAID's approval, closed its office at the end of July. This decision meant that after five years of scale-up activities, including a comprehensive baseline study, endline data were not collected, except for interviews with stakeholders (which took place in December 2012).

This report assumes the Mali that existed geographically and politically throughout the scale-up period—that is, prior to March 2012--unless otherwise specified.

The growth rate of the Malian population was estimated at 3% per annum in 2013, and the total fertility rate (TFR) in 2011 at 6.2 children per woman—down slightly from previous years.[4] The mean ideal number of children was only slightly less than the actual TFR, at 6.3. Use of any method of family planning (FP) was 8.2 percent (and 6.9 percent for modern methods).[5] These data suggest a strongly pro-natalist tradition—a tradition also seen in data on early marriage for females (average age, 16.6) and early childbearing (one-third of women give birth at least once before turning 20).[6] Still, the

[2] World Bank World Development Indicators. http://data.worldbank.org/data-catalog/world-development-indicators. Retrieved August 2013
[3] *Ibid.*
[4] *Ibid.*
[5] Demographic Health Survey, Mali, 2006
[6] *Ibid*.

unmet need for FP among married women was 31.2 percent, indicating that women, at least, may wish for the means to plan and space pregnancies.[7]

The 2013 World Bank World Development Indicators further point to the maternal and child health status:

- Infant mortality rate: 98.2 per 1,000 live births
- Under-five mortality rate: 190.5 per 1,000 live births (up from 176/1,000 live births in 2011[8])
- Maternal mortality rate: 460 per 100,000 live births

For several decades, donor agencies (including USAID and UNFPA) have supported Government of Mali initiatives and nongovernmental organizations (NGOs) in the FP arena. The contraceptive prevalence rate (married women, any modern method) crept up from an estimated 1.3 percent in 1987, to 4.5 percent in 1996, to 5.2 percent in 2001 and to 6.9 percent in 2006. By any global measure, this rise is extremely slow. The 2006 DHS even showed a dip in contraceptive prevalence in Mali's capital, Bamako, since 2001. The low uptake and low continued use of FP prevail, according to the same study, in spite of consistent provision of methods by government facilities, private clinics, and pharmacies.

A 2009 study commissioned by the Institute for Reproductive Health (IRH) found that many potential FP clients had access to, at best, a limited number of methods: typically contraceptive pills, injectables and condoms. Secondary effects dissuaded some potential clients from using the pill or injectables, which were nonetheless the most commonly used modern methods. Long-acting methods, such as implants and IUDs, were not widely available outside of cities at the time of the study.[9]

Aside from questions of FP service provision and geographic accessibility, women and men face real constraints—social, cultural, religious and economic—in recognizing and satisfying their FP needs. Gender norms limit the likelihood that spouses can discuss birth spacing: men are considered to hold unquestioned power over procreation. Women of reproductive age are also silenced by Mali's tradition of gerontocracy. In addition, rumors and myths about FP are common, and likely exacerbate opposition to contraception by men and religious actors. Use of FP, especially methods that alter a woman's menstrual cycle, is seen as a sign of infidelity in a society that places great emphasis on women's monogamy and fertility. Because women have so little voice in reproductive matters, clandestine use of

[7] World Bank World Development Indicators.
[8] UNICEF statistics, 2011 (http://www.unicef.org/infobycountry/mali_statistics.html) Retrieved August 2013.

[9] Institute for Reproductive Health (IRH). To What Extent is the SDM Integrated into Family Planning Programs in Mali? Findings from the CAREF/IRH Study on Scale-Up. Washington, D.C.: IRH for the U.S. Agency for International Development (USAID), 2010

FP methods is not uncommon. But far more commonly—and not surprisingly—women's attitudes toward FP are influenced by the social norms around them and are thus negative.

IRH in Mali Prior to Standard Days Method Scale-Up

In 2005, Mali's Ministry of Health (MoH) and specifically its Division of Reproductive Health (DSR) requested that IRH and USAID in Mali provide assistance to integrate the Standard Days Method (SDM) into the national FP method mix, to increase the country's range of contraceptive methods. SDM's formal introduction in Mali took place in May 2006.

It is noteworthy that SDM appeared in several of the country's normative documents prior to this formal introduction. The head of the DSR had learned of the method while at an FP conference outside of Mali (in fact, she attended an IRH presentation on SDM and other fertility awareness-based methods), and determined that the method should be part of Mali's FP method mix. She subsequently ensured its inclusion it in Mali's reproductive health policy, norms and procedures documents. Until IRH began work in Mali, however, SDM remained a method on the books only: no providers were trained to offer it, nor were CycleBeads available in country.

SDM's introduction was formalized during a visit to Mali by staff from IRH and USAID/Washington's *Extending Service Delivery* project. The visit included presentations, field tours, and the formation of partnerships with an initial group of organizations that would collaborate with IRH to introduce SDM in Mali.[10] In September of 2006, USAID-Mali agreed to support the establishment of an IRH office in Bamako. IRH donated an initial stock of 60,000 CycleBeads in late 2006, and USAID agreed to finance procurement of CycleBeads after these initial stocks were exhausted.

IRH, with the MoH and USAID, selected the operational zones of the large-scale *Projet Keneya Ciwara* (PKC)[11] for the method's introduction. At the time, PKC worked in 11 health districts of seven regions, plus the district of Bamako—a geographic area home to about 30 percent of the Malian population. In a second phase, the project expanded to reach almost all of Mali's 50 districts[12], and SDM work expanded with it.

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[10] IRH. Travel Report for Bernard Balibuno, 2006 (unpublished)

[11] PKC (2003-2011, in two phases) aimed to increase the use of quality health services at the community level, and improve household health practices in Mali. PKC extended and built capacity within Community Health Associations (ASACO; in Mali's decentralized health system, citizen-run committees that manage/oversee local health facilities) to manage the quality, availability and accessibility of health services, and to mobilize community demand for/use of these services. PKC also strengthened the functional links between ASACO and higher levels of the health system. PKC was implemented by a consortium of international and national NGOs in collaboration with the government of Mali. From http://transition.usaid.gov/ml/en/health.html Retrieved August 2012

[12] Mali is divided into eight *régions* and one capital district (Bamako); the *régions* are subdivided into 49 *cercles* (also known as districts). From http://en.wikipedia.org/wiki/Cercles_of_Mali. Retrieved August 2012.

In late 2006, IRH, the MoH and NGO partners—primarily those engaged in PKC—began the cascade approach to training SDM trainers, starting at national level and eventually reaching all eight of Mali's regions plus Bamako. Notably, early trainings focused on SDM only. Later, as IRH was able to insert the method into training curricula and other key documents, SDM took its place alongside other methods in general FP training for service providers at many levels.

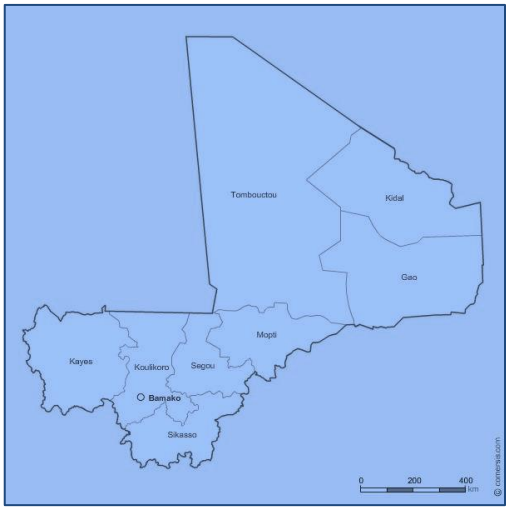

Figure 1. Map Showing Mali's Eight Regions and District of Bamako

These first steps, the cascade training approach, and the placement of initial stocks of CycleBeads in health centers, strongly favored the continuity of trainings and SDM extension across the country with minimal (and sometimes no) additional technical assistance from IRH. Trainings reached downward from regions to districts to *centres de santé communautaires* (CSCOM), especially in the PKC zone.

IRH's early work with SDM in Mali did not include the same pilot research as took place in other countries where the method was scaled up. This is because the MoH wanted IRH to start training FP providers immediately, given that SDM was already in FP norms. The swift start up with no trial period did lead to problems that needed to be rectified later. For example, it was necessary to retrain providers because the initial training curricula were too complex and were not adapted to the Mali context. On the other hand, without pilot efforts slowing the introduction of SDM, Mali offered an opportunity to learn the challenges and benefits of a more rapid scale-up.

At the same time that SDM introduction work was underway, IRH and partners introduced the Lactational Amenorrhea Method (LAM) in Koulikoro region. While IRH's work with LAM continued throughout much of the same period as the SDM scale-up activities described here, LAM is not the topic of this report.

In summary, IRH's technical assistance during this introductory phase brought about:

- Over 300 MoH and NGO trainers trained in SDM, at central, regional, and district levels; trainers in turn trained more than 4,000 providers at more than 700 service delivery points;

HOW SUCCESSFUL WAS SCALE-UP OF SDM IN MALI?

As of March 2012:

SERVICE EXPANSION

SDM services available in an estimated 88% (1,273) of service delivery points and in all eight regions of Mali

19 organizations including the MOH able to build others' capacity to offer SDM

INSTITUTIONALIZATION

SDM fully integrated into national FP program and these sub-systems:

- Norms, policies, guidelines
- HMIS reporting system
- Some pre service training curricula
- Logistics system
- National surveys
- MOH-sanctioned IEC materials

SDM USERS & KNOWLEDGE OF SDM OPTION

IRH was unable to conduct most endline research in Mali, including household surveys on knowledge and use of SDM. However, data available from 2007-2011 show that new SDM users comprised between 1 and 3 percent of new modern FP users in three regions by early 2011

A client follow-up survey found 100% satisfaction with SDM; 75% of clients correctly demonstrated use of CycleBeads, and 94% verified correct placement of ring by referencing markings on their calendar).

Partial service delivery point data indicated at least 31,400 CycleBeads dispensed at public, private facilities.

- SDM institutionalized into national documents including supervision guide, technical forms for *matrones*,[13] and the Contraceptives Acquisition Table.
- Social marketing of CycleBeads by Population Services International (PSI)/Centrale d'Achat Géneriques (CAG),[14] including product sales in private sector pharmacies and shops in seven regions plus Bamako, and awareness-raising via radio and television spots.
- Training of *relais*[15] to promote and distribute CycleBeads in communities, by partners PKC, Association de Soutien au Développement des Activités de Population (ASDAP), Save the Children and Groupe Pivot/Santé Publique [GP/SP]).
- An initial stock of 60,000 CycleBeads and standard IRH training materials.

Use of the ExpandNet Model in Mali

In late 2007, IRH entered a phase of *scaling up SDM* in Mali and several other countries. For this phase, which was planned to last five years until late 2012, IRH in Mali developed the following strategic objective:

Strengthen SDM integration in 90 percent of service delivery points—public sector, private sector and community—in Mali's eight regions and in Bamako.

[13] In Mali, a *matrone* is an auxiliary midwife who has received some formal training; a *sage femme* is a professionally trained midwife. *Matrones* provide most maternal care in rural Mali.
[14] PSI is an INGO supporting private sector social marketing efforts. IRH sub contracted PSI to add SDM to its FP product line. CAG was the government parastatal organization charged with ensuring public sector supply of essential medicines, including contraceptives.
[15] The *relais* is a community health volunteer who is trained to provide information and limited services within her/his community. By contrast, an *agent de santé communautaire* or Community Health Agent has at least a high school-level education or auxiliary health training, and is hired by the local community health association to provide basic health services in facility settings.

To achieve this objective, IRH planned to provide an array of technical assistance, including advocacy, coordination, training and resource provision, to the MoH, donors, international and national NGOs, and other key organizations. Moreover, IRH would use the ExpandNet model to guide its work expanding SDM throughout the country and embedding SDM into public and private health networks.

The head of the MoH's DSR traveled to Washington, D.C. in late 2007 to participate in an orientation on using the ExpandNet model to scale up health innovations—in this case, SDM. IRH first used the model in Mali in November 2008, with the MoH and all other partners that had participated in the SDM introductory phase. Following two days of field visits to better understand the context in which the method was being offered in communities and in public-sector health facilities, the DSR, IRH, and ExpandNet hosted a strategic planning workshop using the ExpandNet model as a basis for reflection on and analysis of scale-up.[16] This high-profile meeting with scale up experts from WHO set the stage politically for SDM scale-up.

The strategic planning workshop that brought together central, selected cercle MOH officials, international NGO and national NGO partners:

- Positioned DSR as the leader and coordinator, with IRH support, of SDM scale-up;
- Prepared attendees to use the ExpandNet model as a common guide for future activities; and
- Resulted in commitment to implementing a draft multi-organizational scale-up plan that included recommendations for action, and the roles and responsibilities of all participating organizations including IRH.[17]

Following validation of the recommendations by the DSR and partners in December 2008, Implementation of these recommendations was undertaken by partner organizations and the object of monitoring by IRH and the DSR.[18]

The scale up partners met again in 2010, under the auspices of the DSR, to assess their scale up progress and to review the results and recommendations from a scale up assessment study commissioned by IRH and conducted by CAREF in 2009. (This study also served as a *de facto* baseline; see Section C.1.) The research, conducted in three regions (Ségou, Koulikoro and Bamako district) where SDM was initially introduced, revealed some significant issues in scale up that led to discussions on strategy adjustments. New findings from a study conducted by ATN+ on FP service provision also offered insight into scale-up

[16] IRH. Travel Report for Susan Igras, Rebecka Lundgren, Bernard Balibuno, Ruth Simmons, and Peter Faijans. 2008 (unpublished)
[17] IRH. Multi-Organizational Strategic Plan Recommendations. Bamako, Mali, 2008 (unpublished)
[18] IRH. Report on Follow-Up on Recommendations from Strategic Planning, 2008 (unpublished)

issues.[19] See Section F.1.b for more on IRH's participatory approach to defining scale-up and strategies and adjusting them along the way as new information on progress became available.

In its role as scale-up catalyst, IRH made use of the ExpandNet Model to adjust plans, once the initial multi-year plan was established. Given the multi-dimensional facets of scale up – requiring movement along both vertical (institutionalization) and horizontal (expansion) axes, in the midst of a constantly changing environment, the model was very useful in clarifying for IRH and stakeholders what successful scale-up meant and what would be required to achieve it. Once IRH introduced the ExpandNet Model at the strategic planning meeting, it was not used extensively for planning after, except for internal-IRH purposes. IRH continually referred to the model, and it remained the principal internal tool for planning and adjusting scale-up direction and choices as needed. In all its internal annual work plan meetings, for example, IRH include a review of ExpandNet elements, complemented by a review of scale-up benchmarks (see Section D) to systematically determine areas needing attention in the coming years. Information and decisions were then shared individually with scale-up partners, who planned their activities accordingly.

Data Sources, Collection and Analysis

IRH made use of an array of primary and secondary data, and routine monitoring information, to inform the scale-up process, identify successes and detect gaps in quality service provision.

Baseline Study, or Situational Analysis (2009)

IRH's baseline study[20] in Mali, done in mid-2009, the second year of scale up, is more appropriately called an analysis of the status of SDM integration to that date. The study assessed progress toward integration via health facility evaluations, and interviews with facility managers, service providers, *relais* and households. All these entities were queried on their perceptions of SDM scale-up. The study took place in the three geographic areas where SDM was first introduced: Ségou and Koulikoro regions, and Bamako.

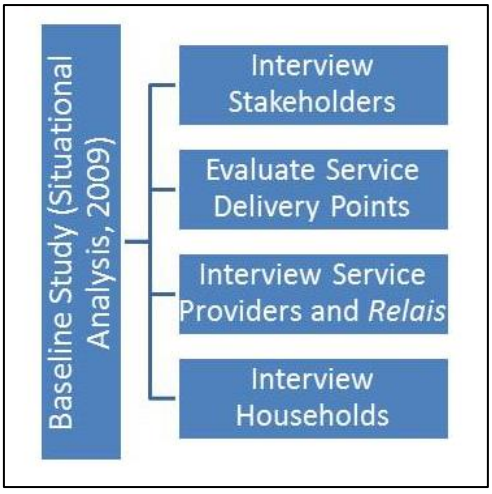

Figure 2: Components of Baseline Study

[19] Gueye, Mouhamadou and Nikiema, Augstin. Évaluation de l'Offre des Services de Planification Familiale Au Mali, Final Report. Bamako : ATN+, 2008

[20] IRH. To What Extent is the SDM Integrated into Family Planning Programs in Mali? Findings from the CAREF/IRH Study on Scale-Up. Washington, D.C.: IRH for the U.S. Agency for International Development (USAID), 2010

Stakeholder Interviews:[21] These included political decision-makers, program managers, donors, private sector and civil society actors. The study revealed that IRH's partner *resource organizations*[22] had fully integrated SDM into their program planning, training/supervision and budgets, with an interest in national scale-up. Its partner *user organizations* had integrated SDM into all information-education-communication (IEC) and training materials, budgets, planning and supervision/training programs, yet also identified the need to ensure that all personnel offering SDM were appropriately trained. Other needs revealed during stakeholder interviews included: more awareness-raising on SDM, more trained service providers, male involvement, a larger pool of organizations able to offer SDM training and supervision, additional funding to ensure scale-up, and de-medicalization of SDM (availability in in non-health settings such as shops).

FP Service Provider Interviews: These interviews allowed IRH to assess quality of SDM services (through provider demonstration of an SDM counseling session), perceptions of SDM and demand for the method; the relative rank of SDM among methods offered; the recording of SDM data in the Health Management Information System forms (Système d'Information Sanitaire, SIS), and service provider attitudes about SDM and demand for SDM. IRH learned that, even though *all service providers interviewed were trained in SDM, only about 37 percent reported having offered it to clients.*

Health Facility Evaluations: These allowed a view of the availability and provision of SDM services. *About half of the facilities evaluated offered CycleBeads to clients, but only a quarter had CycleBeads in stock at the time of the study.*

Relais Interviews: These clarified the role that *relais* played in promoting SDM in communities. A*lthough more than half of health facilities had* relais *who had integrated the method in their health activities, only 44 percent offered SDM along with other FP methods.* This indicates that *relais* were underused as a resource for promoting and offering SDM services.

Household Interviews: The population-based study found a better level of knowledge of FP/SDM among men than women. Analysis revealed several barriers in the environment including: men's reluctance to use any type of FP method for religious or social reasons, women's fear of discussing FP with their husbands, sometimes leading to clandestine use;

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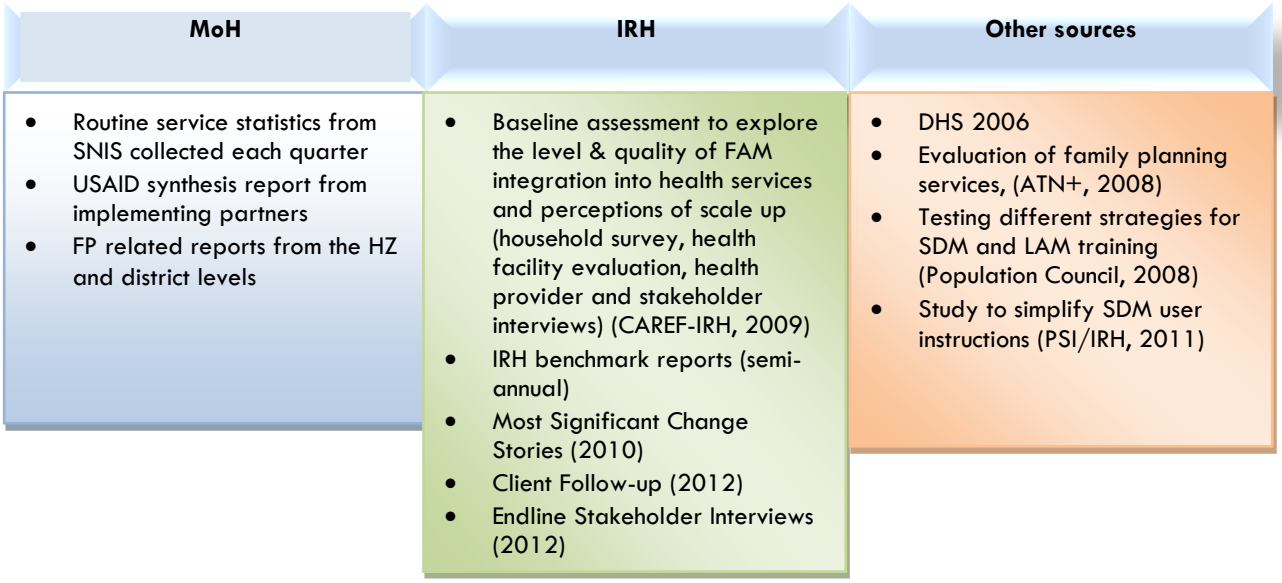
[21] IRH. Stakeholder Perceptions of Wide-scale Integration of Fertility Awareness-Based Methods (FAM) into FP Programs in Mali: Current Status and Future Directions. Washington, D.C.: IRH, Georgetown University for the U.S. Agency for International Development (USAID), 2011.

[22] In the ExpandNet model, *resource organizations* are those that will promote and facilitate wider use of the innovation. *User organizations* are those that will adopt or implement the innovation. In many instances, an organization is both a resource and a user. Table 2, Section E.3/E.4, shows resource and user organizations in Mali.

the cultural norm to have numerous children[23] (up to seven or eight); and a low level of understanding of the benefits of FP and/or birth spacing. Findings allowed IRH to put greater emphasis on interaction around SDM at the community level, by increasing social diffusion in social networks. See Section F.2 for more on creating awareness and demand for SDM.

As noted in Section B, DSR organized a 2010 workshop in which all partners came together to review the baseline study's results and recommendations and discuss plans in light of findings for continued SDM scale-up.

Figure 3. Major Data Sources during SDM Scale-Up 2007-2012



Routine Monitoring and Evaluation

IRH/Washington developed a set of indicators, drawn from the Project Management Plan, to follow progress in all five countries in which SDM was being scaled up. Subsequently, Mali put in place a monitoring and evaluation (M&E) plan that included:

- regular monitoring of benchmarks, allowing for real-time adjustments to strategy and activities,
- supervision of service providers for quality assurance, using the Knowledge Improvement Tool (KIT); used twice since late 2009),
- periodic data collection at service delivery points on availability and use of SDM among other methods offered, and
- follow up of clients/SDM users (once in 2012).

[23] Men and women both expressed a desire for a large number of children—men typically stated a slightly higher number than women—but women were more likely to take measures to space pregnancies.

Resource and user organizations' reports were a further source of information.

In addition to regularly tracking use of USAID grant money (core funds and field support) for scale-up, quarterly monitoring of the resources invested by participating organizations was done, via regular collection of cost share and leveraging figures. This allowed IRH to assess not only the level of resource mobilization and its contribution to scale-up, but also financial gaps. Monitoring is further discussed in Section F.4 below.

Endline Research

Events in Mali in 2012 precluded full evaluation of the extent, depth and quality of scale-up. Only one of three planned studies could be completed: interviews with FP stakeholders to understand perceptions of the SDM scale-up process and recommendations for ensuring that SDM remain part of the FP method mix in the future. By coincidence, in months just prior to the coup d'etat, IRH engaged a consultant to conduct field visits to gather monitoring data, which are also presented here in lieu of endline survey results.

Stakeholder Perceptions of Continued SDM Scale-Up

Stakeholder interviews in December 2012[24] help to create a picture of SDM's status in the last months of the scale-up effort. Nine interviews with FP stakeholder organizations involved in SDM scale-up were conducted. All respondents were Bamako-based with the exception of a District Head from Koulikoro. The interviews indicated a favorable attitude towards the SDM scale-up process and the role of SDM in the national FP method mix.. However, stakeholders expressed some concern in two areas: lingering provider bias about the effectiveness of the method, and the need for scale-up leadership by the MoH/DRS and by IRH. Interviewees made several important recommendations including:

Create awareness and demand for SDM:

- Provide additional funding to the MoH to finish integrating SDM into FP services and to raise awareness of the method through IEC activities at the clinic and community levels and through use of mass media channelssuch as radio and television.
- Continue to work with religious leaders, using SDM as an entré to larger discussions on modern FP use by the faithful.

Continue integration and support for commodity security at service level:

- The MoH/DSR should lead efforts to address issues of CycleBeads supply/resupply and to ensure that pre- and in-service FP training includes SDM .

[24] Recall that this was the only portion of the planned endline study that IRH was able to carry out; interviews were held several months after IRH's program shut down in Mali due to the March 2012 coup d'état and ensuing events.

- Central DSR needs to hold its partners accountable for SDM integration and to work with partners to reach providers to address any lingering doubts about the method effectiveness.

Monitor and evaluate SDM scale-up to ensure its sustainability within FP services:

- Because of the concerns cited, stakeholders suggested that the MoH continue to monitor SDM scale-up – within service delivery, reporting, and national surveys – to ensure it remains a viable option within FP services.

Number of SDM Users in Mali

To obtain some notion of SDM users in a scale up context, with the help of a consultant in early 2012, IRH was able to collect numbers of FP new users from 2007 to early 2011 in three regions (Koulikoro, Ségou, Sikasso) and PSI provided sales data for the same period. The results offer a view of trends in new SDM users over time, and SDM's contribution FP overall in those regions.

Table 1: Proportion of SDM Users to All New FP Users in Three MoH Districts (2007-2011)

Region	New FP Users	New SDM Users	% of SDM Users
Koulikoro	99,193	3,050	3.1
Ségou	131,552	1,196	0.9
Sikasso	149,857	1,374	0.9

Public sector offering of SDM. Based on FP user statistics from health centers in three regions (collected by IRH in 2011-12), it is possible to detect the relative contribution of SDM users to the national FP program: as seen in Table 1,[25] the range is from one to three percent of new FP users. IRH's interpretation of these data is that they reflect many factors – lack of trained providers, lack of CycleBeads at service sites, and lack of awareness of potential clients about SDM option.

Social marketing of SDM. PSI sells contraceptive commodities through private pharmacies and medical offices, including oral contraceptives, condoms, and CycleBeads. Since the introduction of Cyclebeads in 2007, sales have varied depending on the intensity of promotion. After a strong start in 2007, sales decreased while promotion efforts were put on hold during proof-of-concept research to test the possibility of selling CycleBeads in boutiques, which lasted almost two years. A large increase was seen after three full-time promoters were hired to focus exclusively on CycleBeads in Sikasso, Kayes, and Ségou regions, from November 2011 until the program was suspended in March 2012. These promoters implemented the new marketing strategy of targeting men, and made many direct sales to male clients. The program's suspension precluded PSI's planned, widespread broadcast of a Cyclebeads radio spot targeting men.

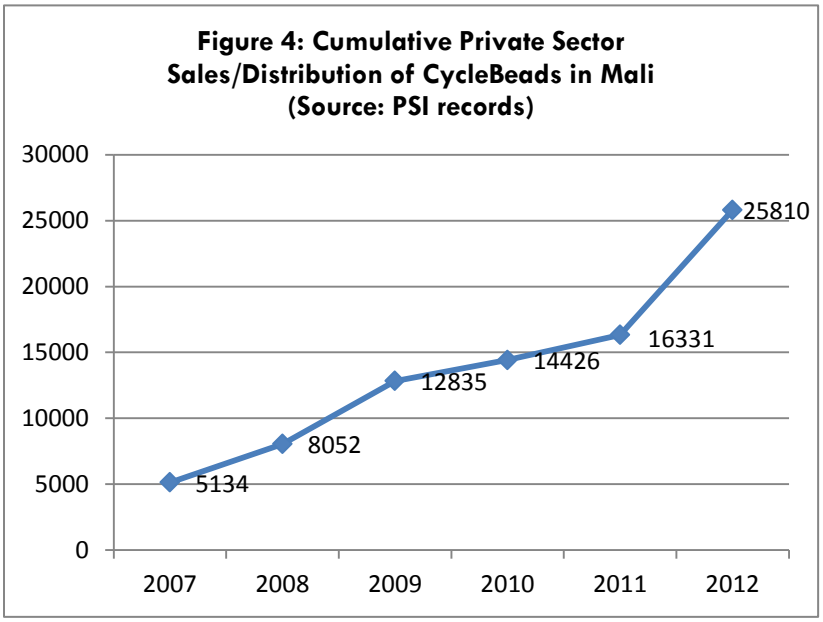
[25] *Rapport sur la collecte des données PF/MJF de 2007 à Mi-2011.*

Table 2: Sales of CycleBeads and Other Socially Marketed FP Methods[26]

Sales	2007	2008	2009	2010	2011	2012	Total
Pill	717,952	1,021,275	783,124	1,137,583	1,438,994	1,035,317	**9,415,911**
Injectable	308,434	329,487	382,783	438,839	453,157	433,770	**2,881,483**
IUD	Not sold	Not sold	563	950	2,792	4,945	**9,250**
Implant	Not sold	Not sold	3,434	14,734	18,445	12,499	**49,112**
CycleBeads	5,134	2,918	4,783	1,591	1,905	9,479	**25,810**

PSI and IRH undertook periodic data collection on the sale and use of CycleBeads in CSCOMs. This allowed not only an assessment of CycleBeads use compared to other methods, but of their availability, from the onset of scale-up through mid-2011.

Figure 4 shows the cumulative number of CycleBeads dispensed from private sector pharmacies, small shops, and community health workers throughout Mali, according to PSI records.27 The period covered is 2007 through early 2012. It is interesting to note the increased rate of sales/distribution in the last year, due to PSI placing SDM retail promoters in Sikasso, Kayes, and Segou Districts. This winning strategy began too late in the scale-up phase, and indicates a lesson learned about introducing SDM through private sector channels: the need to have an initial dedicated effort to establish a new product's place in the retail market.



Quality of SDM Services and Use at Scale

To assess the quality of SDM services, the same consultant conducted provider interviews. Among the findings derived from the 2012 use of KIT with 33 providers, including two doctors, nine nurses and 22 *sages femmes* in seven districts of three regions:[28]

[26] PSI. Family Planning and SDM Data, 2007-2012 (unpublished)
[27] PSI. Family Planning and SDM Data, 2007-2012 (unpublished). Note that figures likely under-report SDM users because not all health centers report SDM users to district level.
[28] IRH. Provisional Provider Monitoring Report using KIT. Bamako, Mali: IRH, 2012 (unpublished)

- Seventy percent of the 33 providers correctly gave the 'eight necessary responses' while demonstrating the use of CycleBeads (i.e. were able to correctly instruct women in its use).
- Eight-two percent of the 22 *sages femmes* correctly gave the 'eight necessary responses' while demonstrating the use of CycleBeads.
- In all seven districts, CycleBeads were available at service delivery points and in contraceptive stocks.

These are positive results of a new method going to scale, but do not compensate for the fact that some IRH partners reported problems in the quality of trainings, and that service provider mobility frequently meant the loss of individuals trained in SDM. IRH responded by organizing supplementary training sessions in certain zones, notably in Ségou and Sikasso regions.

In 2012, the same consultant conducted interviews with SDM users in the three regions to determine user satisfaction with the method, in the context of scale-up rather than pilot . The client follow-up questionnaire with 16 users was applied during client interviews to learn more about the quality of SDM use (after provider counseling) as well as user satisfaction, using a guide developed by IRH in collaboration with service providers in three health districts (San, Kati and one commune of Bamako). Results[29] showed an acceptable level of knowledge and satisfaction among SDM clients:

- All 16 users were satisfied with SDM;
- Seventy-five percent were able to correctly demonstrate use;
- The ring was placed correctly on 73 percent of CycleBeads at the time of interview; and
- Ninety-four percent could verify its correct placement by referencing dates marked on the calendar.

Other Research during Scale-Up

- Most Significant Change story collection and analysis - The qualitative Most Significant Change story collection and analysis revealed narratives of significant change/impact in providers' ability to provide a full range of family planning services, increased body awareness among both young girls and women, couple communication and male engagement[30]
- Research to guide simplification of the user instructions insert for CycleBeads for low literacy clients (with PSI)

[29] IRH. Provisional Client Monitoring Report. Bamako, Mali: IRH, 2012 (unpublished)
[30] IRH. Selection of Most Significant Change Stories in Mali, Final Report. Washington, D.C.: IRH for the U.S. Agency for International Development, 2012.

- With the Population Council, comparison of the effectiveness of SDM training alone, and SDM and LAM training in the same session.[31]
- Follow-up evaluation on effectiveness of a social diffusion strategy. See Section F.2.a.

Summary Assessment of SDM Scale-Up

IRH set two objectives for SDM scale-up in Mali, in alignment with DSR's aspirations for the method within the national FP program:

1. Expand FP options, with an emphasis on increasing sustained access to SDM in FP programs.
2. Achieve SDM integration in 90 percent of service delivery points in the public and private sectors and in communities in Mali's eight regions and the district of Bamako.

To track and measure performance, and in line with other countries where SDM scale up was underway, IRH developed benchmarks for its work in Mali, recorded starting values, and measured progress towards achieving objectives annually. Partner reports were analyzed quarterly, and data were compiled to track progress. **Table 3** below shows achievements in Mali along the horizontal and vertical axes of scale up.

The Benchmark table shows *significant advances* along the horizontal and vertical axes of scale-up. IRH attributes achievements in large part to the resource organizations with which it partnered, and to providing the technical assistance to build, as needed, those organizations' capacities to fulfill their roles in the SDM scale-up. While the MoH (specifically the DSR) did take charge of coordinating integration of SDM, the method's extension occurred via multiple organizations that adopted it into their FP programs and expanded it at the public, private and community levels. (See Section E.3 for more on the role of resource organizations.)

[31]Testing the Feasibility and Efficiency of Interval vs. Back-to-Back Training
Models for Standard Days Method (SDM) and Lactational Amenorrhea Method (LAM) in Koulikoro, Mali. October 2009. Washington, D.C.:Institute for Reproductive Health, Georgetown University for the U.S. Agency for International Development (USAID).

Table 3: Benchmarks Progress

As of July 2012 (updated September 2012)

Mali project goals (by end 2012):

1. Expand FP options, with an emphasis on increasing sustained access to SDM and LAM in FP programs.
2. Achieve SDM integration in 90 percent of service delivery points in the public and private sectors and in communities in Mali's eight regions and the district of Bamako.

Mali population coverage for scale-up: 12.96 million (8 regions of Mali plus Bamako)

Horizontal scale-up*	**Year 1****	**Year 2**	**Year 3**	**Year 4.5**	**Year 5*****	**End of project target (n)**
Proportion of **service delivery points that include SDM** as part of the method mix. (Years 1 and 2 percentages based on targets for three regions only; Years 3-5 based on all eight regions.)	719 (61%)	823 (70%)	880 (74%)	1173 (89%)	**1,273 (96%)**	1,320
Estimated number of **individuals trained** to counsel clients in SDM (all 8 regions and Bamako).	4,956 (71%)	5,135 (73%)	5,822 (83%)	6,088 (87%)	**6,208 (89%)**	7,000
Number of **organizations that have capacity** to undertake SDM activities (resource organizations)	14 (74 %)	16 (84%)	18 (95%)	19 (100%)	**19 (100%)**	19
Vertical scale-up	**Year 1****	**Year 2**	**Year 3**	**Year 4.5**	**Year 5*****	**End of project target (n)**
SDM included in essential or **key policies,** norms, guidelines, and protocols	4 (50%)	4 (50%)	7 (88%)	8 (100%)	**8 (100%)**	8
Presence of public or private training organizations that include SDM in **pre-service training** and/or continuing education	0	0	5 (13%)	17 (45%)	**17 (45%)**	38
Presence of public or private training organizations that include SDM in **in-service training**	10 (91%)	10 (91%)	11 (100%)	11 (100%)	**11 (100%)**	11
Sustainable inclusion of **CycleBeads into donor** procurement system	0	0	2 (66%)	2 (66%)	**2 66%**	3
Sustainable inclusion of **CycleBeads into logistics** systems	2 (100%)	2 (100%)	2 (100%)	2 (100%)	**2 (100%)**	2
Inclusion of **SDM in HMIS**/reporting systems	0	0	0	1 (100%)	**1 (100%)**	1
Inclusion **of SDM in IEC activities,** materials and mass media	3 (38%)	6 (75%)	8 (100%)	8 (100%)	**8 (100%)**	8
Inclusion of **SDM in surveys** (e.g. DHS)	1 (33%)	1 (33%)	2 (66%)	2 (100%)	**3 (100%)**	3

* Numbers and percentages are cumulative; percentages are based on end-of-project objectives

** Year 1 includes achievements registered during the introductory phase (2006-2007)

*** The project was cut short by the March 2012 crisis; Year 5 data here cover approximately six months of activities.

Horizontal Scale-Up or Geographical Expansion

Proportion of Service Delivery Points that include SDM as part of method mix. IRH used the MoH's annual health system statistics report to develop a target: 1,320 service delivery points would offer SDM as part of their method mix, representing 90 percent of all FP service delivery points in Mali. Several estimates underlie these figures. First, the total number of health facilities in Mali (public and private; hospital, health center, health post, specialty clinic, physician's office, pharmacy) changes from year to year. Second, not all health facilities offer FP services and methods. Even though the project was curtailed by the Malian political crisis, IRH achieved 96 percent of its objective.

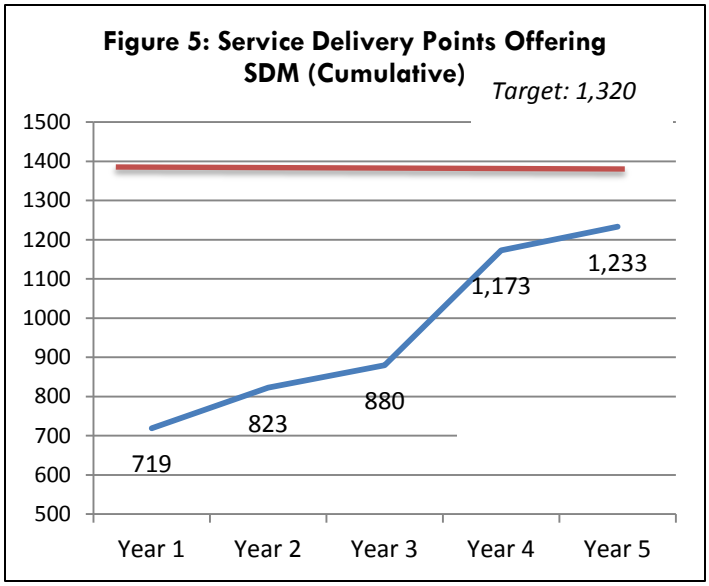
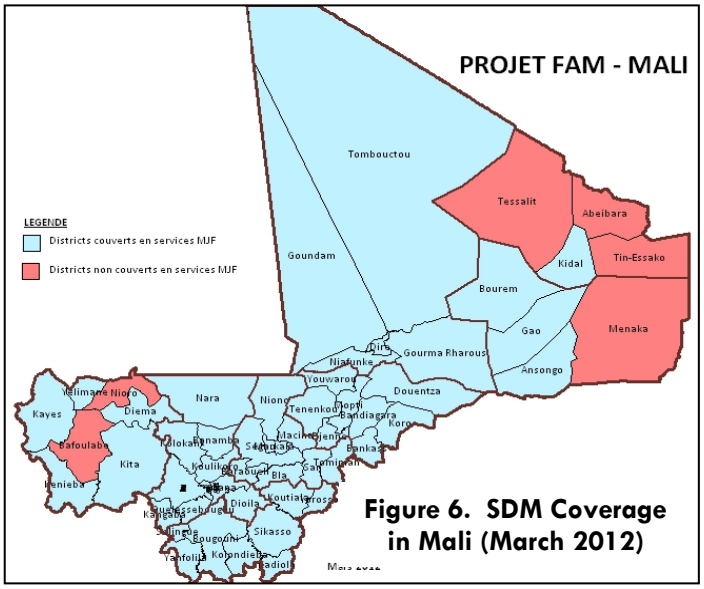


Figure 5 shows the proportion of targeted service delivery points covered (cumulative) over the last five years. As can be seen, the target number of 1,320 service delivery sites was almost met by early 2012.

Figure 6, meanwhile, shows SDM coverage at the district level in Mali several months later, in March 2012. Blue districts indicate that most health personnel were trained (by IRH or partners) to provide SDM to clients in most service delivery points.[32]



Number of individuals trained to counsel clients in SDM. IRH data show that 6,208 service providers were trained to counsel

[32] IRH hesitates to claim 'all' because frequent personnel turnover, closure or opening of a facility can affect SDM service provision at any moment.

and offer SDM. This includes providers that IRH trained directly, and providers that partner organizations reported having trained. Recall that these individuals are formal service providers and not *relais* or Community Health Agents (CHA).

Number of organizations with capacity to implement SDM activities. IRH achieved its objective of building the capacity of 19 organizations to serve as resources for SDM. (See Table 2 for more information.) The great majority of these resource organizations were on board, with capacities strengthened, by the onset of the SDM scale-up phase in late 2007.

Vertical Scale-Up or Integration

SDM included in policies, norms and protocols. IRH achieved its objective of including the method in eight crucial documents.

Public or private training organizations include SDM in pre-service training. Section F.1.d provides information about the rather complex pre-service training environment in Mali, and the several factors that impeded IRH from reaching its target of 38 public or private training institutes that include SDM in pre-service/continuing education.

Public or private training organizations including SDM in in service training. Eighty-nine percent of the targeted 7,000 providers were trained in SDM by Year 5. Most of those not reached were located in more isolated and at times insecure parts of northern Mali, and in Cayes, one of the newest areas reached for SDM expansion.

Sustainable inclusion of CycleBeads in donor procurement systems. The Benchmarks table shows that IRH achieved inclusion of SDM in two of three donor procurement systems: USAID has formally agreed to procure CycleBeads, and they are included in the MoH Contraceptives Acquisition Table.[33] (The MoH is not a donor but is the catalyst for all procurement). See Section F.3.a for more about SDM and Mali's FP procurement system.

Sustainable inclusion of CycleBeads in national logistic systems. CycleBeads have been included in Mali's private and public sector logistics systems since Year 1 of scale-up. Section F.3.b has further information on those systems.

Sustainable inclusion of SDM in the SIS reporting system. Tools for Mali's SIS are revised every five years. The MoH agreed to include SDM in the first such revision that fell within the scale-up period. That revision process took place, with IRH technical assistance, from

[33] Specifically, the Contraceptives Acquisition Table is managed by the MoH's DPM. Linked to a computerized database, the table tracks consumption and stock levels of medical consumables including FP methods, in both the public and private logistics streams. The MoH and donors use the table at regular intervals to determine procurement needs.

late 2011 into early 2012. By the time of the March 2012 crisis, the tools for use at service delivery and district levels were completed, and they included SDM. The MoH will complete the final step of integrating data from those levels into the national electronic SIS when possible.

Inclusion of SDM in IEC activities, materials and media. IRH achieved its objective of embedding SDM into eight key IEC pieces. See Section F.2.a for more information on IEC.

Inclusion of SDM in surveys. IRH advocacy led to SDM's inclusion as a unique variable in all three planned surveys. These were the 2008 *Etude d'Analyse Situationelle* organized by the USAID-funded program *Assistance Technique National* (ATN+) and the MoH, the 2009-2010 Multiple Indicator Cluster Survey (UNICEF) and the Demographic and Health Survey planned for 2012. IRH's advocacy for the latter was extensive, and the individual in charge of the Mali survey finally agreed that SDM would appear in the questionnaire as a specific, modern method. (The 2006 DHS in Mali had no clear place to record use of SDM; responses may have been recorded as 'male condom,' 'periodic abstinence,' or unspecified traditional methods.) The 2012 DHS was suspended due to the March crisis.

Analysis of Scale-Up Process as a Function of ExpandNet Elements

This section discusses how the ExpandNet elements of *innovation*, *environment*, *resource organizations* and *user organizations* contributed to or affected SDM scale-up in Mali.

How the SDM Innovation Evolved

In Mali, all elements of the SDM package except the CycleBeads themselves underwent modifications, in content or application, over the course of scale-up.

Insert (user instructions) and Calendar: In the third and fourth years of scale-up, PSI and IRH revised the SDM user insert for CycleBeads sales in shops. The objective was an insert that clients, including low-literacy clients, could understand even without the help of a service provider. PSI and IRH began by testing the existing insert with clients. The revised inserts had clearer images and less text. ASDAP, a resource

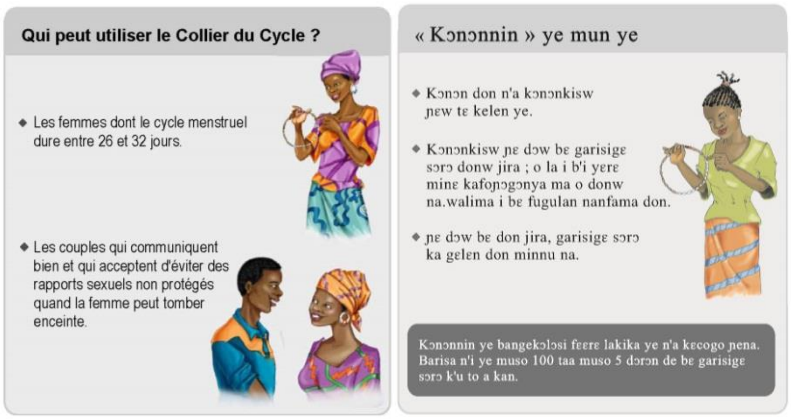


Figure 7. Elements of Client Insert *Who Can Use CycleBeads?* (left in French) and *What are CycleBeads?* (right in Bambara).

organization, translated the text into Bambara, but PSI chose to retain French in its inserts given the multiple languages in Mali. In 2011, the calendar was revised for use through 2014. PSI and MoH health facilities, in collaboration with IRH, updated CycleBeads stocks by removing the old / adding the new inserts and calendars.

SDM training modules: In 2009, based on a request from MoH and partners, the SDM training module for service providers was simplified. The module was adapted for the instruction level of nurses and *matrones* during a workshop organized by the MoH with IRH support. Next, the revised module was disseminated to all levels of the healthcare pyramid and to partners. Also in 2009, to facilitate integration into existing in-service FP training curricula, the MoH and ATN+, with technical assistance from IRH, revised the national training module dealing with interpersonal communication and FP for all methods, including SDM.

SDM Supervision: FP supervision activities within public health facilities and partner organizations accorded SDM the same level of importance as all other methods. During Years 4 and 5 of scale-up, IRH used the KIT, a supportive supervision aid, with MoH service providers in several health districts to determine the quality of SDM services and organize improvements as needed.

IEC and mass media materials: Initially, IRH and partners focused on appropriate IEC tools for use in CSCOMs and clinics. The IEC package comprised posters, t-shirts and inserts that featured CycleBeads. In 2008, PSI developed posters, brochures and spots that also highlighted who is eligible for and how to use SDM. Since 2010, PKC, IRH and UNICEF have adapted all MoH-sanctioned FP IEC materials used by *relais* and women's groups to include SDM. Finally, PSI and CAG, while integrating SDM in their marketing program, launched a series of television and radio spots to raise awareness of the new method option and promote sales of CycleBeads in shops around the country.

Effect of Environment on Scale-Up

Political/institutional environment: Mali's MoH and especially the DSR showed consistently strong support of SDM, beginning with solicitation of the method as an additional birth spacing option. The MoH carried this support into large-scale projects with major institutional partners. For example, ATN+ included SDM in training modules and, in conjunction with IRH, provided training sessions for service providers throughout the country on all FP methods including SDM. PKC likewise integrated SDM into *relais*' activities and IEC materials. The same holds true for PSI.

Mali's decentralization process could also be seen as favorable to SDM scale-up. Communes gained some authority to make their own decisions, select their own priorities and take their actions on behalf of their population's health, rather than simply follow directives formulated at the national level. When women's savings associations (under the aegis of *Coalition des Femmes du Mali* or COFEMALI) chose to promote SDM via social diffusion in several communes, authorities had the liberty to respond to the women's requests for engagement and support without seeking permission from national authorities. Mayors in the populous communes of Koutiala, San, Kati and Ouelessebougou, for example, lent their support by serving as 'mentors' to, or presiding over, training sessions held by the women's associations, and some mayors participated in mobilizing women to attend meetings that IRH organized in their communes.

The systemic, progressive integration of SDM, resulting from continuous IRH advocacy, coaching and coordination at the levels of policy and programs, and technical assistance to strengthen partner organizations and providers' capacities, supported SDM's extension throughout Mali as evidenced by trainings undertaken by various partner organizations with only minimum assistance from IRH.

Donor environment: IRH's subjective impression is that global donor trends in favor of long-acting methods took their toll on SDM scale up in Mali. To be clear, donors did not issue directives that other methods be curtailed, but the emphasis on increasing contraceptive prevalence rates (which is most easily or rapidly done by promoting long-acting methods) in Mali influenced the MoH and by a number of the resource and user organizations working on SDM integration in partnership with IRH.

Also, from late 2009 until 2011, USAID stopped providing field support to the multi-country SDM project. This influenced political and financial support for activities and IEC. For example, beginning in late 2008, it was not possible to conduct IEC activities that IRH felt it needed to raise awareness of SDM.

IRH managed this political environment by, on one hand, regularly providing technical assistance to trainings organized by the MoH and USAID's bilateral projects on FP in general (including SDM), and on the other by promoting social diffusion of SDM via women's groups and youth school groups, outside the formal health care system.

Sociocultural environment: The influence of cultural and religious norms that do not support FP, and the generally low educational level of most Malians and especially Malian women, were factors that inhibited uptake of contraceptive methods including SDM. Thus IRH looked to a *social networks approach*, in which social interaction among friends, within social and other groups, is used to accelerate information diffusion, make use of peer

influence, and provide support for new behaviors (in this case, use of SDM or another FP method). IRH and partners undertook several activities designed to build demand and promote acceptance of FP by harnessing social networks. These were:

- Social diffusion via leaders of women's groups (notably, savings and loan groups under the aegis of COFEMALI). The premise is that when trusted leaders present the concept of FP to existing groups of women, positive attitudes spread rapidly within the group and then into the community at large in a 'snowball effect'. See Section F.2 for more on this form of social diffusion in Mali.
- Training for networks of religious leaders (Islamic Network for Population and Development, the *Union National des Femmes Musulmanes du Mali*) to present general FP concepts, dispel myths, and promote SDM in particular.
- Encouraging men, in their roles as husbands and partners, to support their wives to use FP/SDM, via radio spots that aired in five regions. Women's group leaders also visited husbands of SDM acceptors, as part of the social diffusion activity.
- Reaching students with educational sessions, providing information on FP and the menstrual cycle (using CycleBeads as a teaching tool) in secondary schools.

Resource Organizations and User Organizations

The great majority of IRH's 19 partners in Mali played a dual role during SDM scale-up: they were resource *and* user organizations. Recall that a *resource organization* is one that promotes and facilitates wider use of the innovation, while a *user organization* adopts or implements the innovation. Three resource organizations –in addition to the MoH's DSR – must be singled out for their strategic importance to SDM scale-up in Mali:

- PKC, which contributed from the very beginning by integrating SDM in its intervention districts. At the community level, the *relais* supported by PKC offer the method, and it was integrated into PKC's substantial IEC repertoire including radio spots and the *boites à images* and booklets used by *relais* and leaders of women's groups. PKC trained service providers in 13 districts, and more than 13,000 *relais*. It also provided CycleBeads to *relais*.
- ATN+, with its mandate to provide technical assistance to the health system at national and district levels. ATN+ contributed to vertical scale-up (finalization of SDM's integration in certain normative documents) and to horizontal scale-up (extension of service provider training in FP and SDM throughout the country).
- PSI, through its FP social marketing program in the private sector. PSI integrated SDM and provider training in clinics, pharmacies, and in the general commercial network (shops). The organization produced and aired radio and television spots, and created posters on SDM, which served an SDM awareness-raising function more generally (ie, not only to promote sales).

Table 4: Resource and User Organizations and Their Roles in SDM Scale-Up

Organization	User (U) Resource (R) Both (B)	Nation	Region	District	Community	Private	Roles and Responsibilities
1. MoH and its institutions: DNS, DSR, CPS, PPM, DPM, DRS, CSREF	B	X	X	X	X		- Integrate SDM into method mix. - Train service providers. - Supervise service providers. - Provide political support for scale up. - Integrate CycleBeads into contraceptive procurement system. - Integrate SDM in the SIS and DHS. - Integrate SDM into FP IEC program.
2. PSI	B	X	X	X	X	X	- Integrate SDM into private sector via social marketing program (clinics, pharmacies, shops, general commerce). - Train public and private service providers. - Collect SDM data. - Ensure CycleBeads availability in private clinics, pharmacies, shops. - Produce, distribute IEC items: posters, calendars, radio/TV spots. - Provide research for insert.
3. ATN+ (Consortium of Abt Associates, Intrahealth, GR/SP and JHS/CCP	R	X	X	X			- Advocate for SDM integration into RH/FP policy/norms documents (national training and supervision manuals). - Train public service providers. - Integrate SDM into pre-service training curriculum.
4. PKC (Consortium of CARE, Intrahealth, GR/SP and JHS/CCP	B			X	X		- Train *relais* in all methods including SDM. - Integrate SDM into IEC, mass media materials (for relais and women's group leaders. - Provide CycleBeads to *relais*.
5. AMPPF (also member of GP/SP)	B		X	X	X		- Train service providers in all methods including SDM. - Purchase and provide CycleBeads to own clinics. - Offer SDM to clients in own clinics. - Collect data on SDM. - Collect Most Significant Change stories.
6. ASDAP (also sub-contractor of PKC and member of GP/SP)	B			X	X		- Train *relais* in own intervention zones. - Provide SDM services in communities and in own youth centers.
7. GP/SP (also member of PKC and ATN+ consortia)	B			X	X		- Train *relais*. - Offer SDM to clients via *relais*.
8. MSI	B		X	X	X		- Train service providers and *relais*. - Offer SDM and other FP methods.
9. Save the Children	B		X	X	X		- Train Community Health Agents (CHA). - Purchase and provide CycleBeads to CHA.
10. COFEMALI	U			X	X		- Promote, offer SDM communities (social diffusion). - Purchase and provide CycleBeads to communities.

11. Croix Rouge Mali	U		X	X	X		- Train volunteers to promote SDM, FP. - Promote SDM, FP at community level. - Integrate SDM into volunteer training manuals.
12. CRS	B			X	X		- Promote SDM through own project, food education partners in Mopti
13. Health Policy Initiative	B		X	X	X		- Train religious leaders in SDM
14. Intrahealth (also member of PKC and ATN+ consortia)	R		X	X	X		- Key partners of IRH on pre service curriculum - Integrate SDM into Gao nursing school curriculum - Train pre-service *monitrices* and teachers - Work with IRH and ATN+ to elaborate FP curriculum integrating SDM for pre service
15.UNICEF	R (donor)		X	X	X		- Integrate SDM into IEC tools for CHA
16. WHO	R (and donor)		X				- Support MoH in RH/FP guidelines revision and implementing MoH activities for FP/ SDM promotion
17. INFSS	R		X				- Coordinating academic body for all health education institutes; Key Partner in pre service curriculum - Integrate SDM into Gao nursing school curriculum - Train teachers, monitrices pre service - Work with IRH and ATN+ to elaborate FP curriculum integrating FAM for pre service
18 UNFPA	R (donor)		X				- Future support to MoH for SDM procurement
19. USAID	Donor		X				- Donor of field support fund

Continued Analysis of ExpandNet Elements: Strategic Choice Areas

Capacity Building and Technical Assistance

During the first phase of SDM introduction in Mali (approximately three years) IRH's participatory, multi-organization approach to using the ExpandNet model, along with the capacity building that resulted, was vital to SDM scale-up. IRH provided capacity building and technical assistance in various forms to MoH institutions, international and national organizations, and bilateral projects (PKC and ATN+) at national, regional and district levels. These entities, in turn, promoted SDM scale-up within their own purviews. This approach allowed rational and balanced growth along the horizontal and vertical axes of scale-up.

Training Service Providers (and Supervisors)

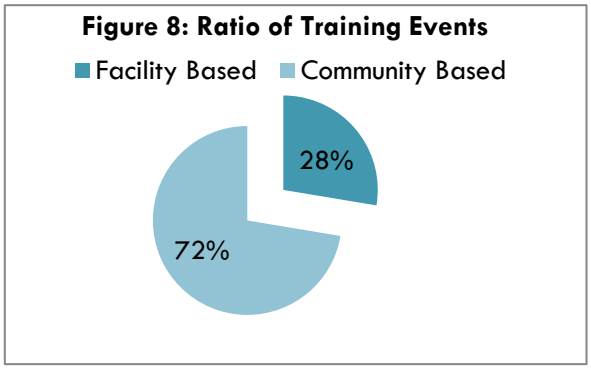
At the time it introduced SDM in Mali, IRH staff used its original SDM training module to train trainers and service providers. In 2009, this SDM module was adopted into MoH FP training curriculum, spearheaded by the MoH and ATN+, with technical assistance from IRH and relying on previous IRH research and publications on SDM. At the MoH's request, IRH simplified the language in the original SDM training module to better suit the instructional level of nurses and *matrones*. This led to a far shorter training time without compromising learner comprehension. Use of the revised version began in 2010.

The SDM training process throughout the method's scale-up was done in cascade via MoH structures and partner organizations. In the first SDM training round in late 2006, IRH staff trained national-level trainers from MoH institutes, some regional-level MoH trainers, and trainers from partners involved in reproductive health and FP. In the second training round, held shortly afterward, the focus shifted from national to regional levels. The trainers were IRH, MoH national and regional trainers and some partner (PKC, ATN+) trainers. The trainees were regional MoH trainers, regional health teams, district health teams and NGO supervisors.

Table 5: Cascade Training Process, from National to Community Levels

Level	*Trainers*	*Trainees*
National	IRH	Trainers from MoH institutes, regional MoH trainers, partner organizations
Regional	IRH, MoH (national and regional team), some partners such as ATN+ and PKC	Regional MoH trainers, regional health team, district health team, NGO supervisors
District	Regional health team, district health team, NGO supervisors	CSCOM health teams, district providers
CSCOM	NGO trainers, CSCOM health team, with district health team support and (often) IRH technical assistance	Often CSCOM health workers, *relais*, CHA, women's group leaders
Community	NGO trainers, CSCOM health team, with district health team support and (often) IRH technical assistance	*Relais*, CHA, women's group leaders

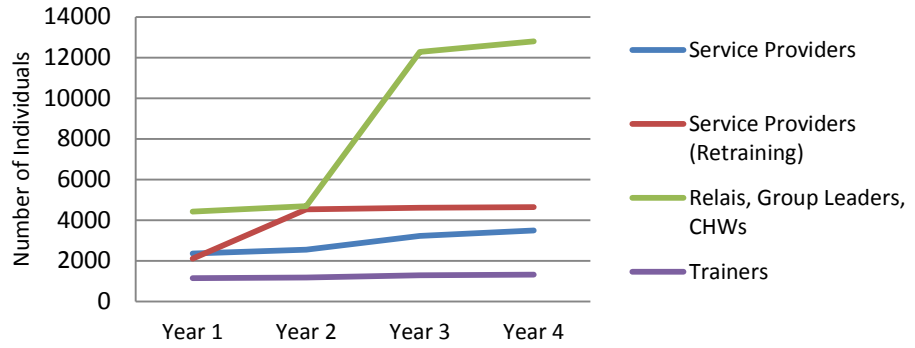
As training progressed, the MoH recommended that SDM training be further integrated into standard FP training—rather than treated as a stand-alone topic—for providers and *relais*. IRH oversaw the method's integration into existing training materials, and the MoH took the lead in trainings organized in health facilities, with support from projects, IRH and NGOs active in these zones.



An environment shift around 2010 allowed a new possibility for services expansion when the MoH embarked on a formal program to provide community-based FP information and services nationwide. IRH was able to ensure that the revisions made to service provider training manuals during this initiative were also made in training documents for volunteer health service providers like *relais*, women's group leaders and CHA. This meant that changes to training and service provision protocol were standardized at all levels, and paved the way for SDM extension at the community level, via *relais* and women's groups in PKC's community-level initiatives, but also via IRH's social diffusion strategy with women's savings and loan

groups (see Section F.2). Community extension soared. IRH records show that over 13,000 relais were trained. Figure 8 shows the ratio of training events that were facility-based (for health workers) and community-based (for *relais*, women's associations). Figure 9 shows estimated numbers of health workers and agents trained each year, and reflects the changing training focus over the scale-up phase.

Figure 9: Number and Type of People Trained to Provide SDM Services



SDM was also integrated into the MoH's FP supervision documents, including the FP-specific supervision manual and the integrated health supervision manual. (IRH notes that FP-specific supervisions are more likely to result in a useful assessment of *service quality* than the integrated supervisions, which attempt to assess all functions of a health facility over the course of one or two days.) Supervision is supposed to occur quarterly in MoH facilities, but is in reality irregular due to resource constraints.

Particularly towards the end of the scale up phase, IRH supported district health teams' ability to follow up on the quality of SDM service provision by using the KIT in selected districts with selected service providers. (See Section C.3.)

Participatory Approach to Define Scale-Up and Strategies

As noted in Section B, initial application of the ExpandNet framework took place following the initial strategic planning workshop (2008). Participants used the framework as a basis for reflection on and analysis of critical factors (and gaps) in SDM scale-up in Mali. The workshop also allowed for capacity building in using a systems-oriented approach for planning scale-up for representatives of various groups: the MoH, PKC and ATN+, donors (USAID, UNFPA), and other NGOs and partners engaged in FP programming in Mali. By the end of the workshop, a multi-organizational plan for scale-up emerged with assigned roles and responsibilities to all actors including IRH.[34] Implementation of the plan's recommendations was the object of regular follow-up by IRH and the DSR.

[34] IRH. Multi-Organizational Strategic Plan Recommendations. Bamako, Mali, 2008 (unpublished)

This introduction and application of the ExpandNet framework brought about significant change. The resulting multi-organizational plan allowed IRH and stakeholders to lay the foundations for an integrated framework for coordinating all parties' work, under the direction of the DSR. Because the plan was validated by the MoH, it was possible to hold a follow-up meeting with the same organizations in March 2010, to share research on the status of SDM scale-up, which indicated some significant issues, notably a lack of SDM users (measured from a population-based study) and issues with CycleBeads availability at facility level. The 2010 workshop included:

- Analysis of the state of implementation of the 2008 strategic plan's recommendations, and
- Development of solutions to overcome challenges and constraints identified in the 2009 baseline study.

Workshop participants also proposed recommendations for next steps, and these recommendations served as the basis for annual activity plans thereafter.

In effect, all elements of the ExpandNet model were reviewed with partners each year, informed by either the results of research or progress noted in the M&E system and from secondary data. For example, the 2010 workshop involved reviewing recommendations from the initial SDM strategic scale-up plan, combined with examining the results of the baseline study. This led to certain strategic choices for work in 2010 and 2011 at facility and systems levels. Related to this, the baseline revealed that women and men were unaware of SDM and information about the new method was not diffusing through communities.. IRH and several resource organization partners chose to prioritize *social diffusion* via networks of women's associations, and to elicit male involvement via radio spots on SDM (in partnership with PSI).

Transitions

IRH in Mali underwent several important personnel shifts that slowed project activities, including departure of both the Training/M&E Assistant and the Country Representative in 2009. A new Representative was hired late in 2009, and filled both positions throughout most of 2010. Late that year, a Training/ M&E Assistant came on board. These slowed efforts to maximize partnerships, since the new Country Representative was coming from a field position and needed to establish relationships with partners as well as provide technical support to scale up at the field level. It also took some time for the new Training/M&E Assistant to get up to speed on the project scale up directions.

Engaging Institutions within Educational System (Pre-Service Training)

During Year 2 of scale-up, IRH undertook advocacy meetings with the DSR and the director of the INFSS[35] to integrate fertility awareness-based methods into the curricula of public and private health schools in Mali. INFSS, which oversees quality and content in all health schools, gave its approval. IRH embarked on orienting professors and clinical monitors in INFSS' own school and several private schools in Bamako (see Table 4; 2009 activities), providing modules and documentation on SDM and LAM. In the same year, IRH invested similar advocacy efforts with Mali's Faculty of Medicine, to incorporate SDM in coursework for medical doctors. Professors (under the direction of the Chief of the Department of Studies and Research in Gynecology) worked together to integrate the material in their terminal classes.

To meet the needs of students in Mali's numerous public and private health schools,[36] IRH supported Intrahealth[37] tasked with leading the development of a comprehensive reproductive health and FP curriculum for nursing students, and provided technical assistance to integrate SDM into that curriculum. Intrahealth tested the curriculum in Gao, intending to distribute the final version to other schools throughout Mali. Unfortunately, a lack of funding meant that dissemination did not occur.

IRH was keen to better understand the pre-service training environment and possibilities for SDM integration into curriculum, and the actual availability of FP curricula (and their inclusion of SDM) in health schools. In 2011, therefore, it undertook an evaluation in several schools in Bamako and elsewhere in Mali.[38] The evaluation confirmed a lack of adequate and consistent repdroductive health and FP training materials. Instead, schools had course guides (but not full curricula) that listed topics by domain, and the MoH norms and procedures documents. A professor teaching FP methods would use these, and his/her own knowledge, to convey information to students. IRH shared its findings with USAID, technical partners, and USAID, which resulted in renewed efforts to improve quality and consistency in pre-service training.

In late 2011 and early 2012 the INFSS, the MoH, ATN+ and IRH held an extended workshop with personnel of several health schools (public and private) to develop a standardized set of curricula, each tailored to the level of service provider being trained, covering all FP methods. IRH intended to accompany the curricula roll-out in 38 schools during the course of 2012, but this was interrupted by the military and political crisis in March. By the

[35] The Institut National de Formation en Science de la Santé, or National Health Sciences Training Institute, is situated within Mali's Ministry of Education, but of course links closely with the MoH.
[36] The MoH encourages the proliferation of such schools because of the country's need for health professionals; through INFSS, it monitors quality and content of coursework in all schools.
[37] An international NGO, currently leading implementation of the global USAID-funded Capacités+ project.
[38] Castle, Sarah for IRH. Pre-Service Evaluation, Final Report. Washington, D.C.: IRH, 2011 (unpublished)

premature close of the project, only the schools that participated in the workshop are known to be in possession of the curricula.

Table 6: Schools with which IRH Collaborated to Integrate SDM/FP Curricula

School		Types of Provider	Private	Public	Type / Year of Collaboration		
					SDM training	FP curriculum workshop	Other
1	Ecole de Formation en Santé, Badala	Nurses, Sages femmes	√		2009		
2	Ecole Issa Paule	Nurses, Sages femmes	√		2009	2011-2012	
3	Faculté de Medecine	Doctors, Pharmacists		√			2009 & 2010
4	Ecole Bouctou Bamako	Nurses, Sages femmes	√		2009	2011-2012	
5	INFSS Bamako	Nurses, Sages femmes		√	2009	2011-2012	
6	CFTS Ségou	Nurses, Sages femmes	√		2011		
7	EFAS (Ecole de Formation des Agents de Santé)	Nurses, Sages femmes	√			2011-2012	
8	EFSS (Ecole de Formation en Santé de San)	Nurses, Matrones	√		2011		
9	INFSS Kayes	Nurses, Sages femmes		√	2011		
10	INFSS Mopti	Nurses, Sages femmes		√	2011		
11	INFSS Sikasso	Nurses, Sages femmes		√		2011-2012	
12	CFTSS (Centre de Formation des Techniciens Supérieurs de la Santé)	Health technicians	√			2011-2012	
13	Ecoles Santé Plus	Nurses, Sages femmes	√			2011-2012	
14	ESB (Ecole de Santé de Bamako)	Nurses, Sages femmes	√			2011-2012	
15	IFSSA (Institut de Formation en Science et Santé).	Nurses, Sages femmes	√		2012	2011-2012	
16	EFTSS (Ecole de Formation des Techniciens Supérieurs de Santé)	Senior health technicians		√		2011-2012	
17	INFSS de la Croix Rouge Santé de San	Nurses, Matrones, Volunteers		√		2011-2012	

Dissemination, Awareness-Raising, Demand Creation

What was done to Create Awareness and Demand

IRH and partners invested in developing IEC and interpersonal communication tools for use in health facilities and communities. During the scale-up period, these included: inclusion of SDM into *boites à image* for *relais*, calendars (done by CAG), incorporation of CycleBeads/SDM into the FP booklet used by leaders of women's groups, and t-shirts featuring an image of CycleBeads for use in FP campaigns. Through such efforts, SDM and CycleBeads were an integral part of FP 'educational chats' at health facilities and in *relais*' discussions in communities.

By 2008, PSI had incorporated SDM into its social marketing program, and progressed to integrating SDM into its communication activities. It produced posters and brochures that were distributed in private clinics and pharmacies. IRH also distributed the posters in health facilities after service provider training. PSI, in collaboration with IRH and the MoH, produced radio and television spots on SDM and on the menstrual cycle. These spots were aired over the course of a month in 2008. After a period in which no information was aired nationally, IRH and health facilities rebroadcast the radio spots in certain health districts as part of a MoH FP campaign. In the same campaign, health personnel held awareness-raising meetings with women's associations.

In 2010, to complement print and mass media, IRH launched a social diffusion activity with a network of women's savings groups under the aegis of COFEMALI. This involved working with 170 leaders of women's associations in three districts to provide peer education on FP in general, and on SDM use and eligibility criteria in particular. The women learned to promote and distribute CycleBeads within their groups and within their communities. They all received posters and flyers on SDM, which they used as teaching aids. They also learned to refer interested parties to the nearest health center for other contraceptive methods. The results of this initial social diffusion effort were encouraging: in the first three months, the 170 leaders held 1,580 awareness-raising sessions, made more than 2,200 home visits, referred more than 3,440 women to their local health facility for further FP services, and distributed more than 850 CycleBeads.[39] Social diffusion had an impact on new use of modern methods overall in the participating districts, as shown in Table 7.

[39] IRH. *Working with Women's Associations to Increase Acceptability and Use of Family Planning in Mali* (Brief). Washington, D.C., IRH, 2011. http://irh.org/wp-content/uploads/2013/04/Mali_Social_Diffusion_FAMProject_8.5x11.pdf Retrieved August 2012.

Table 7: Change in Number of New FP Users (Any Modern Method) Where Social Diffusion Took Place via COFEMALI Women's Savings and Loan Activities

District	New FP Users 4/10 – 6/10	Social Diffusion Activities	New FP Users 7/10 – 9/10	Pre- to Post-Implementation Increase
Kati	2,326		2,469	6.1 %
Koutiala	1,099		1,642	49.4 %
San	700		957	36.7 %
Total	***4,125***		***5,068***	***22.9 %***

Source: Working with women's associations to increase acceptability and use of family planning in Mali

See E.1 Sociocultural environment for more information on activities by IRH and partners to raise awareness of and demand for SDM.

Constraints on Demand Creation

Despite IRH and partners' enthusiasm for activities to increase demand for SDM, project resources were limited. This meant that producing and airing educational spots was constrained, as was extending the very successful social diffusion strategy described above. A further constraint came in the form of donor policies that increasingly favored long-acting methods of FP. For example, organizations like PSI and Marie Stopes International (MSI) promoted and distributed CycleBeads via donor-supported projects. Having received follow-on donor funding to support long-acting methods, SDM and short-term methods became less prominent in their work with public and private facilities and in communities. Moreover, service providers became more likely to promote long-acting methods because they received 'encouragement' bonuses for new users.

This same constraint had its effects on service provider training. ATN+, PSI and MSI training sessions on FP and FP counseling concentrated heavily on long-acting methods, to the detriment of all other methods including SDM. IRH noticed this clearly when using KIT to evaluate provider knowledge of SDM. Some providers stated that they received three times as much information on the method during the KIT visit than they had during their original FP training. Low scores observed in the KIT results may be due at least in part to this shift in donor priorities.

Finally, if IEC campaigns are to be successful in creating demand, method *availability* is essential. Thus the reticence of several ASACOs to purchase CycleBeads—fearing they would not be good income-generators for their health center—was also a constraint.

Advocacy for SDM Integration and Scale-Up: Successes and Failures

Advocacy actions by IRH, both from Washington, D.C. and in Mali, were of considerable value. These included presentations; networking and coordination; and meetings with the MoH, USAID and other important partners. Given the nature of IRH's project in Mali, the advocacy and coordination role was a key contributor to achieving success on the horizontal and vertical axes of the ExpandNet model.

IRH Mali is confident that MoH and other partner FP programs have taken ownership of SDM as a result of their participation in scale-up work. The March 2012 crisis, however, prevented IRH and others from taking the final, formal steps of integrating CycleBeads into two of the three following categories:

Box 2: SDM Champions

The ***head of MoH's DSR*** was a staunch advocate for SDM throughout the introduction and scale-up phases. Two other SDM **champions** also merit mention:

1. PKC – Projet Kineya Ciwara
At the onset of scale-up, this USAID project managed by a consortium of NGOs facilitated the introduction of SDM in its 13 intervention districts in seven regions. It integrated SDM into *relais* training modules, and into IEC materials used by *relais* and women's association leaders. As PKC grew to reach 35 districts in eight regions plus Bamako, it trained more than 13,000 *relais* on FP including SDM with its own resources. Finally, it provided stocks of CycleBeads to trained *relais* for promotion and distribution in communities, and ensured that statistics on new users were recorded by the appropriate MoH health facility.

2. A leader of a woman's association in Kati Sananfra village
After being trained by IRH in FP, including SDM, she was especially vigorous in social diffusion activities. She advocated with men and women to accept SDM, and for men to support women in its use. She trained women and youth in her community to promote and sell CycleBeads and even purchased 600 CycleBeads from the health center with her own money, for resale in her community. She also followed up with SDM users.

Donors' Contraceptive Purchasing Calendars

The Benchmarks table (Table 3) showed that IRH achieved SDM inclusion in two of three planned donor procurement systems. In reality, Mali's procurement system does not lend itself to such a tidy calculation. The three donors in question are the MoH, USAID and UNFPA. MoH, though not a donor, is included because it must formally request an item before USAID and/or UNFPA will take action, and because it will eventually begin to procure some commodities directly with its own funds.

Recall that an initial lot of 60,000 CycleBeads was given to Mali in 2006, and service providers are still drawing from that stock to meet their clients' requests for SDM. In mid-2011, the MoH agreed to include CycleBeads in future orders if analysis of SIS data were to show a pre-determined decrease in stocks at public and private levels. USAID at that time declared itself ready to act on future requests for CycleBeads. UNFPA, however, did not make a formal commitment. IRH considers the commitment of MoH and USAID to be firm, while acknowledging that no entity has actually procured CycleBeads for Mali and hence tested that commitment. IRH further acknowledges that analysis of CycleBeads supply can only be done accurately if data on SDM's use is accurate and complete. Figure 10 offers a

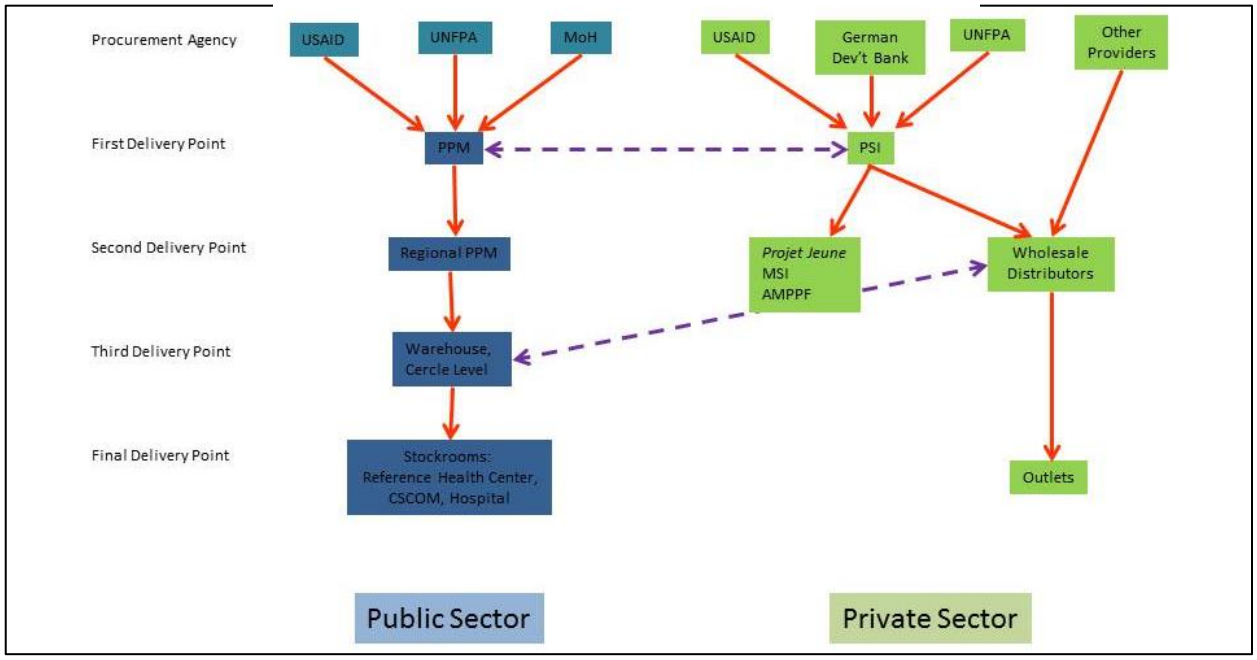
graphic overview of Mali's contraceptive procurement and logistics systems in the public and private sectors.

Logistics Systems

The Benchmark table likewise shows that CycleBeads are fully integrated into Mali's two logistics systems: the public and the private. This is indeed the case, and resulted from extensive IRH advocacy with stakeholders in both systems. In became apparent that CycleBeads stockouts at facility was a widespread access issue and in 2010, IRH proposed that DPM write formal reminders to all stakeholders about the integration of CycleBeads into the systems, and IRH and partners used field supervisions with MoH to remind health managers and providers of the same.

IRH's 2009 situational analysis found that 22 percent of service delivery points surveyed had experienced stockouts of CycleBeads in the three previous months, and about 15 percent of sites that had CycleBeads in stock did not have one or more of the method's auxiliary items (insert, extra ring, calendar). A survey of stakeholders in 2011 found an improved situation. Still, the fact remains that Mali's logistics systems for all health supplies are subject to problems that extend beyond CycleBeads and are larger than any project alone could solve.

Figure 10: Procurement and Logistics in Mali



MoH SIS

In late 2011 and early 2012, the MoH undertook a revision of its SIS tools, providing IRH the opportunity to integrate SDM into the data collection system. IRH provided technical

assistance at the two MoH workshops, one for the service delivery point level and one for the district level, in which the primary and secondary SIS tools for reproductive health and FP were revised. These tools were then to be integrated into an electronic system at the tertiary or national level. Unfortunately, the crisis of March 2012 delayed completion of the SIS revisions and rollout.

Monitoring SDM Scale-Up

The benchmarks that IRH defined for all five SDM scale-up countries were the foundation for results monitoring. In Mali, benchmarks were followed and analyzed regularly, as were the various elements of the ExpandNet model, and served to guide decision-making and planning. In addition, review meetings with partners were sources of information and inspiration. Periodic supervision of service providers by IRH and district health teams, using KIT to assess service quality, were likewise brought to the table for discussion, as referenced in the results shown in Section F.1.a.

Tools and Schedule for Monitoring

Throughout the scale-up phase, SDM did *not* appear as a unique category in Mali's SIS: the FP registers that service providers used to record methods distributed, and data consolidation documents at the district and national levels. Service providers throughout Mali were trained to write 'SDM' or 'Collier du Cycle' in the 'Other' column of the FP register. Thus, SDM user information did not get passed systematically up the reporting chain to district and central levels. Instead, IRH would periodically collect user information to monitor SDM uptake.

MoH's own monitoring schedule calls for quarterly supervision of CSCOM and CSREF facilities, and semi-annual supervision of facilities at the regional and national levels. Mali's vast size, the number of health facilities, and the lack of human and financial resources mean that supervisions tend to be irregular. IRH itself often resorted to collecting SDM data over the telephone (quarterly), and when visiting facilities to monitor service quality during supervision of service providers or SIS agents. Table 8 shows the various methods IRH and partners used to collected data on FP in general and SDM in particular.

Table 8: Types and Frequency of Monitoring, All Levels of Health System

Type of Monitoring	Frequency	Comments
Supervision and collection of statistical data	Quarterly at district level Semi-annually at regional and national	IRH with district teams IRH with regional SIS team IRH with PSI team
Application of KIT	Once in 2011 and once in 2012	With the district team
SDM Client Follow-up	Once in 2012	IRH and providers of health districts and community health centers
Global Study/Survey to collect SDM and FP data in general	Once in 2011/2012	IRH with the teams of the Region and district health

Resource Mobilization

Since 2008, IRH in Mali used USAID 'field support' funds to round out core funding for its activities. USAID/Mali ceased providing funds in 2010, and re-instigated them in 2011. This had serious implications for the kinds of activities IRH could undertake. Supervision was scaled down and planned IEC/promotion activities to increase awareness of the SDM as a new method option were essentially eliminated.

IRH regularly collected Information on leveraging, or partners' use of their own resources to promote some aspect of SDM scale up. For example, PKC used its own funds to train thousands of *relais* in FP including SDM; other instances involved supervision, promotion activities, or providing CycleBeads. Leveraging estimates for the 2007-2012 period were calculated to have a value of $613,100 USD.

CycleBeads have been integrated in the Contraceptives Acquisition Table since 2008, which should assure that new orders will be placed when new stock need to be ordered.

Conclusions

Key Elements That Facilitate Scale-Up

Reflecting on its experience in Mali over the past several years, and on results obtained, IRH notes the considerable value of the following factors in facilitating scale-up.

- Putting in place—from the beginning—multiple, compatible partnerships that reflect or represent the spectrum of organizations involved in Mali's health sector. By extension, maintaining these partnerships with attractive opportunities for collaborative action throughout the scale-up period.
- Building the institutional capacities of these organizations, on SDM and on the scale up process, in order to foster a culture of coordination and shared responsibility among partners engaged in scale-up. IRH notes the particular attention it paid to the private sector.
- The continued leadership of the MoH/DSR in promoting all FP methods, and its coordinating role with all organizations addressing FP gaps and services, also served to ensure a certain level of accountability of organizations in SDM scale-up.
- Using and sharing evidence-based research, and M&E of current activities, not only for planning but for attracting and engaging partners. Examples are the joint reviews of the 2008 strategic plan recommendations, the 2009 baseline study results, the Most Significant Change story collection report, and briefs on project successes in Mali and other countries.

- Offering an array of technical assistance was very important for maintaining equilibrium between advances on the two scale-up axes.
- Although it did not occur in a timely way, it is notable that facilitating SDM's integration into the SIS as early as possible in scale-up would have facilitated data capture on SDM use and thus provided government-sanctioned evidence on the method's acceptance by the population.
- Creating demand for SDM and FP should be continuous, and should occur at several levels, especially at the community level where needs for FP information in general are still sizeable. This would allow for the consolidation of certain achievements in the vertical axes, notably the logistics and procurement system.

Lessons Learned on Horizontal Scale-Up

As much as scale-up leaders hope that user organizations contribute their own resources as a show of ownership of the SDM, so do these partners and the MoH expect IRH to provide resources in ongoing efforts to extend the method. Without significant resources to offer, this expectation often constrained IRH's ability to provide assistance, such as training, M&E, and awareness-raising to create demand, to user organizations.

Certain aspects of SDM availability, provision and promotion merit further attention, in public facilities and in communities. The 2009 baseline showed that, even though more than half of providers interviewed claimed to offer SDM just as they offered other methods, only 24 percent of service delivery points had CycleBeads in stock at the time of the study.[40] This led IRH to commit to making periodic visits to collect data on use and availability of CycleBeads.

Evidence derived from applying KIT during supervisions clarified the need to link training and supervision efforts as a way to embed quality assurance in SDM service provision, and to offer periodic refresher training to service providers. The results from the use of KIT with providers lead IRH to believe that this use of KIT could lead to improved service quality and commitment to provide SDM. However, this approach can be costly in terms of time and other resources for supervision

Lessons Learned on Vertical Scale-Up

It was of great importance to IRH to seize opportunities that would advance the systemic integration or vertical scale-up of SDM. Working with MoH, ATN+, PKC and others, IRH was able to bring research results and documentation on SDM to the creation and revision of national normative documents on reproductive health and FP. IRH's partnerships with MoH and PKC meant it was well positioned to integrate SDM into IEC materials for service providers and *relais*. The achievement in SDM institutionalization brought about by

[40] IRH. To What Extent is the SDM Integrated into Family Planning Programs in Mali? Findings from the CAREF/IRH Study on Scale-Up. Washington, D.C.: IRH for the U.S. Agency for International Development (USAID), 2010

integrating the method into Mali's pre-service FP curriculum for private and public schools is a good example of seizing opportunity from within a framework of collaboration between IRH, ATN+, MoH and INFSS. These achievements were important not only in terms of advancing vertical scale-up, but also because they made good use of limited financial resources.

IRH had hoped to integrate SDM into the SIS far earlier than actually happened, and advocated quite extensively for the MoH to reconsider its schedule of revising data collection tools every five years. The MoH was amenable to including SDM in its tools, yet had no resources to change the SIS revision schedule. If IRH wanted to move more quickly to include SDM, the MoH suggested that IRH fund an earlier revision. Altering the calendar and process for SIS revision was beyond IRH's scope and means.

Sustainability of SDM Scale-Up

Significant progress was made across the various components of scaling up SDM at the national level. Admittedly the coup d'etat and continuing political issues in Mali will influence efforts to consolidate SDM scale-up. Nevertheless, to assure that these achievements continue to be sustained and/or advanced, however, IRH identified key actors and strategies to move SDM forward in terms of advocacy, capacity building, logistics and procurement, IEC, and HMIS and M&E. See Table 9 for a table of action items and responsible parties committed to ensuring sustainability of SDM scale-up.

Table 9: Sustainability Action Plan

Scale-up Component	Action for Sustainability	Responsible Party
Advocacy	2. Advocate for inclusion of SDM in next DHS.	2. USAID
Capacity Building	4. Continue including SDM in FP training and supervision. 5. Include SDM as part of the FP activity focus in new USAID bilaterals. 6. Maintain SDM as part of the national FP training programs/curriculum for facility and CBD-based services.	4. MOH and current USAID bilaterals (PKC and ATN+) 5. USAID 6. MOH
Logistics and Procurement	3. Include CBs in the FP produce line in the private sector to replace IRH-funded PSI CB promotion. 4. Assess CB procurement need for two to five years (in light of oversupply of CB at the end of the Awareness Project).	3. USAID and other private sector FP donor 4. MOH
IEC	2. Finance TV and radio male involvement in SDM promotion campaign (created by PSI) to maintain increased sales under retail promoters.	2. USAID and other donors
HMIS/ Monitoring & Evaluation	3. Monitor that SDM information is completely and correctly recorded in revised HMIS. 4. Include SDM opt-in module in next DHS following resolution of the political crisis.	3. MOH 4. MOH with USAID